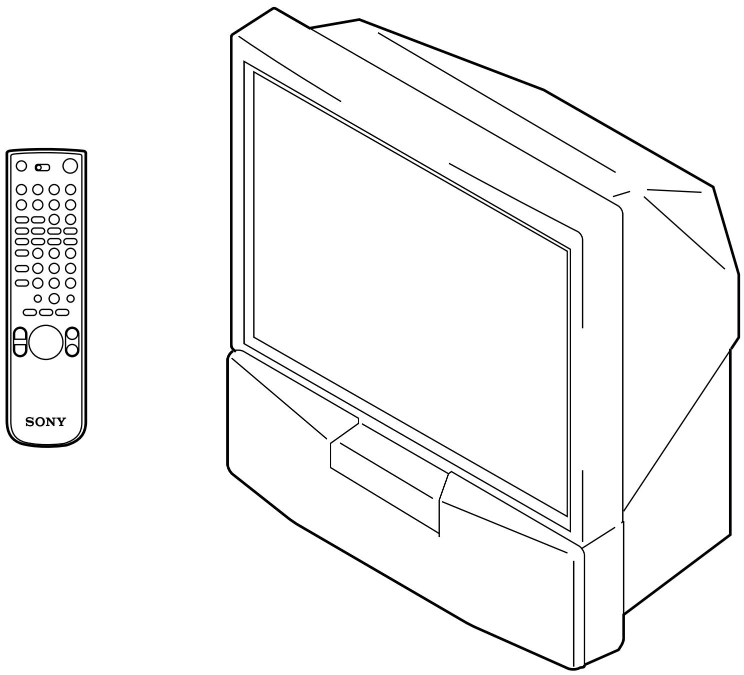
SERVICE MANUAL RE-2 CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KP-41S5	RM-862	AEP	SCC-N60C-A	KP-41S5K	RM-862	OIRT	SCC-N62D-A
KP-41S5B	RM-862	French	SCC-N63B-A	KP-41S5R	RM-862	Russian	SCC-N62C-A
KP-41S5G	RM-862	Greek	SCC-N60D-A	KP-41S5U	RM-862	UK	SCC-N61B-A



MICROFILM

∗ Please file according to model size. .... ☐

41

PROJECTION TV

SONY®

SPECIFICATIONS

Television system B/G/H,D/K,I,L
Colour system PAL/SECAM
NTSC 3.58/NTSC4.43(VIDEO IN)
Channel coverage See " Receivable channels and channel displays " on this page.
Projected picture size 41 inches
Approx. 103cm measured diagonally

Terminals
Rear
Center speaker input terminals, 2 terminals
(L, R), audio outputs-phono jack
1 21-pin Euro connector
(CENELEC standard)
- inputs for audio and video signals
- inputs for RGB
- outputs of TV audio and video signals

2/ 2 21-pin EURO connector
- inputs for audio and video signals
- inputs for S Video
- outputs for audio and video signals (selectable)

3/ 3 21-pin Euro connector
- inputs for audio and video signals
- inputs for S video
- outputs for audio and video signals (selectable, the same output source as the 2/ 2 connector)

Front
3 S video input-4-pin DIN
3 video inputs-phono jack
(L.R), Audio inputs-phono jacks
Headphone jack -stereo minijack
Sound output 2 x 30W (music power)
2 x 15W (RMS)
Centre SP input 30W (RMS)(using as the centre speaker)
Power consumption 155W
Dimensions(WxHxD) 948x992x 511 mm
($37^3/_8$ x $39^1/_8$ x $20^1/_8$ inches)
Mass Approx. 43kg (94 lbs 13 oz)
Supplied accessories See page 6.
Other features Digital comb filter (High resolution)
FASTEXT

Design and specifications are subject to change without notice.

Receivable Channel and Channel Displays

	Receivable channel	Iudication on the screen
B/G/H	E2..12 21..69	C02 C03 C04..C12 C21..C69
CABLE TV (1)	S1..41	S01 S02..S41
CABLE TV (2)	S01..S05 M1..M10 U1..U10	S42..S46 S01..S10 S11..S20
ITALY	A B C D E F G H H1 H2 21..69	C11..C69
D/K	R01..R12 R21..R69	C02..C12 C21..C69
CABLE TV (1)		S01 S02..S41
CABLE TV (2)		S42 S43..S46
CABLE TV	B.. O S21..41	S02.S03..S17.
		S21..S41
L	F2..F10 F21 F69	C01..C12 C21..C69
I	B21..B68	C21..C68

TABLE OF CONTENTS

(CAUTION)
SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

SAFETY-RELATED COMPONENT WARNING!!
COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESECOMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFEOPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

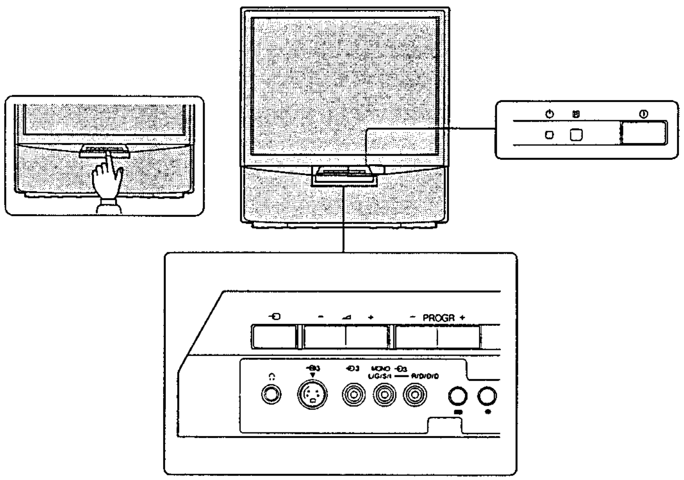
SECTION 1
GENERAL

The operating instructions mentioned here partial abstracts from the Operating Instructions Manual. The page numbers of the Operating Instruction Manual remain as in the manual

Overview

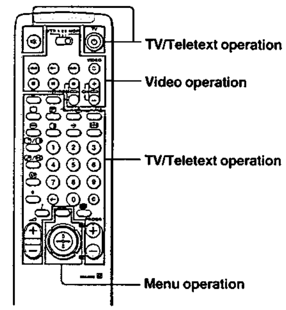
This section briefly describes the buttons and controls on the TV set and on the Remote Commander. For more information, refer to the pages given next to each description.

TV set-front



Symbol	Name	Refer to page
ⓘ	Main power switch	14
⏻	Standby indicator	14
PROGR+/–	Programme buttons	14
◿ +/–	Volume buttons	14
⇥	Input select buttons	15
∩	Headphones jack	20
⇥Ⓢ 3, ⇥ 3, ⇥ 3	Input jacks (S video/video/audio)	21
▭	Auto Preset button	8
⊞	Auto Convergence button	9

Remote commander



TV/Teletext operation

Symbol	Name	Refer to page
🔇	Mute on/off button	15
TV ⏻	TV Standby button	14
▭	TV power on/TV mode selector button	14
⊜	Teletext button	15
⇥/⊕	Input mode selector/	15
	Teletext: Freezing the subpage	18
⇥/⑦	Teletext: Reveal button	18
1,2,3,4,5,6, 7,8,9 and 0	Number buttons	14
-/--	Double-digit entering button	14
C	Direct channel entering button	13
◿+/–	Volume control button	14
PROGR +/–	Programme selectors	14
▲▼	Teletext: Page up/page down buttons	18
●	Picture adjustment button	16
♪	Sound adjustment button	16
⊞	On-screen display button	15
◷	Time display button	15
⊟	Button to change Screen Format	15
⇨	Teletext: Favourite pages button	19

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Menu operation

Symbol	Name	Refer to page
MENU	Menu on/off button	See below.
⊕	Joystick for Menu selection	See below.
	Press to confirm selection (OK function)	

Video operation

Symbol	Name	Refer to page
VTR1/2/3, MDP	Video equipment selector	23
◀◀ ▶ ▶▶ ■ II ● VIDEO ⏻ CH +/–	Video equipment operation buttons	23

No function on this set

Symbol : ▭/▭, ▭/▭, ▭, +, ▭, ▭, ⇥/⑦ (for TV operation)

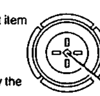
For the Menu System

Use the MENU button and the joystick as follows.

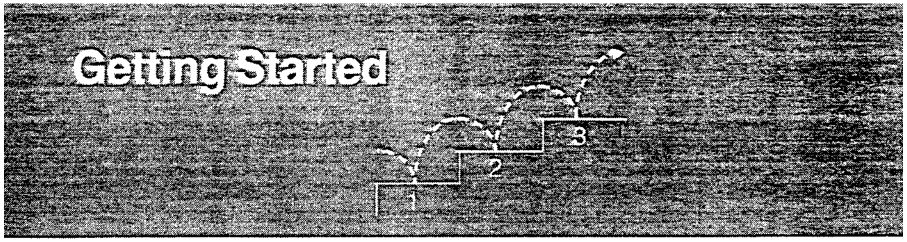
1 Press MENU button to switch menu on or off.



2 Use the joystick as follows:



The operable functions of the joystick are displayed on the screen.



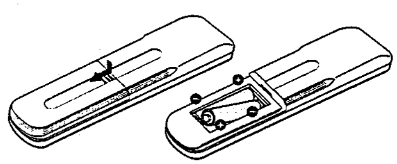
Step 1 Preparation

❶ Check the Supplied Accessories

When you've taken everything out of the carton, check that you have these items:

- RM-862 Remote Commander
- Two IEC designation R6 batteries
- Wrench (1)
- Bracket (2)

❷ Insert the Batteries into the Remote Commander

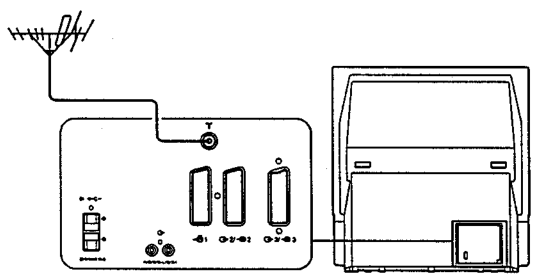


Remove the cover.

Check the correct polarities.

Note: Always remember to dispose of used batteries in an environmentally friendly way.

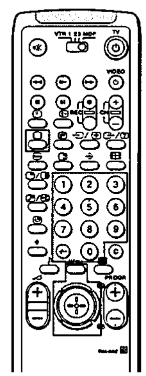
❸ Connect the Aerial

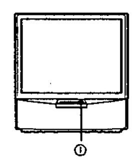


Fit an IEC aerial connector attached to 75-ohm coaxial cable (not supplied) to the ⫪ socket at the rear of the TV.

Step 2 Tuning in to TV Stations

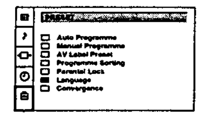
GB

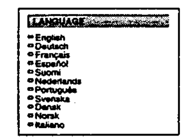


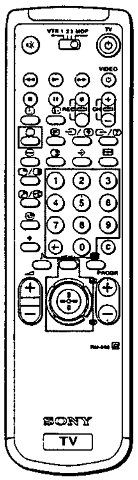


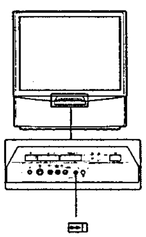
❶ Choose a Language

1. Depress ⓘ (main power switch) on the TV.
   The TV will switch on. If the standby indicator on the TV is lit, press ▢ or a number button on the Remote Commander.
2. Press MENU.
3. Push the joystick to blue or green to select the symbol ⊟, then push to yellow.
   The PRESET menu appears.
4. Push the joystick to blue or green to select "Language", then push to yellow.
5. Push the joystick to blue or green to select the language you want, then push to yellow.
6. Press MENU to restore the normal TV picture.









❷ Preset Channels Automatically

With this function, the TV automatically searches and stores up to 100 channels onto programme positions. If you prefer "Presetting Channels Manually", please refer to page 10 in Additional Presetting Functions.

1 Depress ⏻ (main power switch) on the TV.
The TV will switch on. If the standby indicator on the TV is lit, press ▢ or a number button on the Remote Commander.

2 Press and hold the ▭ on the TV until the automatic menu is displayed and the search starts.
After all available channels are stored, the normal TV picture is shown.

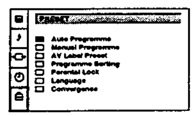
Presetting channels automatically by using the Remote Commander

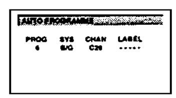
1 Press MENU.

2 Push the joystick to blue or green to select the symbol ▭, then push to yellow.
The PRESET menu appears.

3 Push the joystick to blue or green to select "Auto Programme".

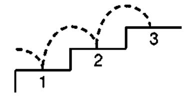
4 Push to yellow and hold until the AUTO PROGRAMME menu is displayed and the search starts.
After all available channels have been preset, the normal TV picture is shown.



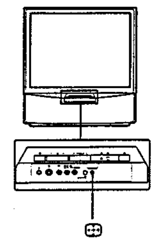


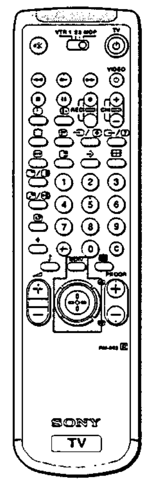
Note
You can sort the programme positions to have them appear on screen in the order you like. For details, see "Sorting Programme Positions" on page 11.

Step 3 Adjusting Colour Registration (CONVERGENCE)



GB





Converge the Red, Green, and Blue Lines

1 Press ⊡ button on the TV.

2 The Auto Convergence function works for about 30 seconds.

When the auto convergence function does not work correctly

Adjust the colour registration by selecting the "Convergence" of the PRESET menu.

1 Press MENU.

2 Push the joystick to blue or green to select the symbol ▭, then push to yellow.
The PRESET menu appears.

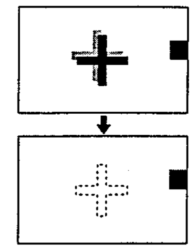
3 Push the joystick to blue or green to select "Convergence", then push to yellow.
The CONVERGENCE menu appears.

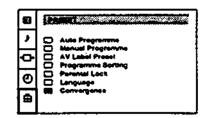
4 Push the joystick to blue or green to select "the line" (vertical and horizontal lines in red and blue) you want to adjust.
Press the joystick to confirm.
: red vertical line (left/right adjustment)
: red horizonta line (up/down adjustment)
: blue vertical line (left/right adjustment)
: blue horizontal line (up/down adjustment)
The line to adjust is selected.

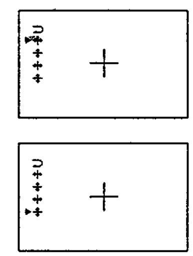
5 Push the joystick to blue or green to converge the selected line with the green line in the centre.
Press the joystick to confirm.

6 Repeat steps 4 and 5 to adjust the other lines, until all the lines have overlapped to form a white cross.

7 Press MENU to restore the normal TV picture.

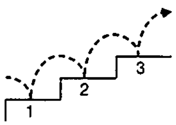




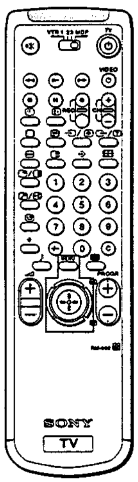


Note
The Auto Convergence function does not work:
- when no signal is input.
- when the input signal is weak.
- when the screen is exposed to spotlights or direct sunlight.
- when you watch the teletext broadcast.

Additional Presetting Functions



MANUAL PROGRAMME PRESET



Presetting Channels Manually

Using this function, you can preset channels one by one to different programme positions. This is also convenient to allocate programme numbers to video input sources.

1 Press MENU.
2 Push the joystick to blue or green to select the symbol ⊟ on the menu screen. Push to yellow to confirm the selection.
3 Push to blue or green to select "Manual Programme". Push to yellow to confirm the selection.
4 Push to blue or green to select the programme position (PROG) to which you want to preset a channel. Push to yellow to confirm.
5 Push to blue or green to select the TV broadcast system (SYS) (I for U.K., B/G for western European countries, D/K for eastern European countries, L for France) or a video input source (AV1, AV2, AV3, YC2, YC3, RGB). Push to yellow to confirm.
6 Push to blue or green to select "C" (for terrestrial channels) or "S" (for cable channels). You can also select "C" or "S" by pressing C on the Remote Commander. For selecting "C", press C once, and for "S", press it twice. Push to yellow to confirm.

There are two options to preset channels manually:

a) You know the channel number.
Please use method "Direct Input".
or
b) You don't know the channel number.
Please use method "Search".

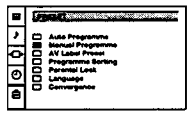
7 a) Direct Input

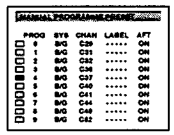
Select the first number digit of "CHAN" (channel), then the second number digit of "CHAN" with the number buttons on the Remote Commander (e.g. for channel 2, first press 0, then 2).

7 b) Search

Push the joystick to blue or green to search for the next available channel.

8 If you want to store the channel, go to step 9. If not, select a new channel using the number button on the Remote Commander or push the joystick to blue or green to resume the search.
9 Press the joystick to confirm.
10 Repeat steps 4 to 9 to preset other channels.
11 Press MENU to restore the normal TV picture.





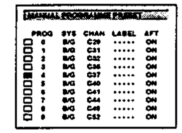
MANUAL PROGRAMME PRESET

Manual Fine-Tuning

Normally, the automatic fine-tuning (AFT) function is already operating.

If the picture is distorted, however, you can manually fine-tune the TV to obtain a better picture reception.

1 Press MENU.
2 Push the joystick to blue or green to select the symbol ⊟ on the menu screen. Push to yellow to confirm.
3 Push to blue or green to select "Manual Programme". Push to yellow to confirm.
4 Push to blue or green to select the programme number which corresponds to the channel you want to manually fine-tune.
5 Push to yellow repeatedly until the AFT position changes colour.
6 Push to blue or green to fine-tune the channel frequency (–15 to +15).
7 Press the joystick to confirm.
8 Repeat steps 4 to 7 to fine-tune other channels.
9 Press MENU to restore the normal TV picture.



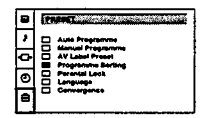
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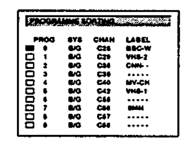
PROGRAMME SORTING

Sorting Programme Positions

This function enables you to sort the programme positions to a preferable order.

1 Press MENU.
2 Push the joystick to blue or green to select the symbol ⊟ on the menu screen. Push to yellow to confirm.
3 Push to blue or green to select "Programme Sorting". Push to yellow to confirm.
4 Push to blue or green to select the programme position of the channel you want to change. Press joystick to confirm.
5 Push to blue or green to select the programme position of the channel you want to exchange. Press joystick to confirm.
6 Repeat steps 4 and 5 to sort other programme positions.
7 Press MENU to restore the normal TV picture.

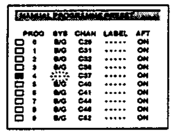




MANUAL PROGRAMME PRESET

Skipping Programme Positions

This function enables you to skip unused programme positions when selecting them with the PROGR +/– buttons. However, by using the number buttons you can still select the skipped programme position.

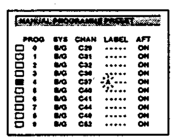


1 Press MENU.
2 Push the joystick to blue or green to select the symbol ⊟ on the menu screen. Push to yellow to confirm.
3 Push to blue or green to select "Manual Programme". Push to yellow to confirm.
4 Push to blue or green to select the programme position you want to skip. Push to yellow to confirm.
5 Push to blue or green to select "- - -" in the position SYS (system). Press the joystick to confirm.
6 Repeat steps 4 and 5 to skip other programme positions.
7 Press MENU to restore the normal TV picture.

MANUAL PROGRAMME PRESET

Captioning a Station Name

Channels are automatically labelled during presetting. You can, however, individually name a channel or a video source using up to five characters.



1 Press MENU.
2 Push the joystick to blue or green to select the symbol ⊟ on the menu screen. Push to yellow to confirm.
3 Push to blue or green to select "Manual Programme". Push to yellow to confirm.
4 Push to blue or green to select the programme position with the channel you want to label. Push to yellow repeatedly until the first element of the position LABEL is highlighted.
5 Push to blue or green to select a letter or a number (select "-" for a blank). Push to yellow to confirm. Select the other four characters in the same way.
6 After selecting all characters, press the joystick to confirm.
7 Repeat steps 4 to 6 to label other channels or video sources.
8 Press MENU to restore the normal TV picture.

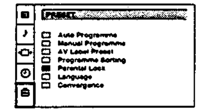
– 8 –

PARENTAL LOCK

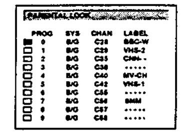
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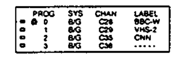
Using Parental Lock

This function enables you to prevent children from watching undesirable broadcasts.



1 Press MENU.
2 Push the joystick to blue or green to select the symbol ⊟ on the menu screen. Push to yellow to confirm.
3 Push to green or blue to select "Parental Lock". Push to yellow to confirm.
4 Push to green or blue to select the channel you want to block. Press the joystick to confirm.
The symbol 🔒 appears before the programme position to indicate that this channel is now blocked.
5 Repeat step 4 to block other channels.
6 Press MENU to restore the normal TV picture.



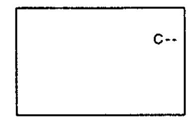


If you try to select a programme that has been blocked
The message "LOCKED" appears on the blank TV screen.

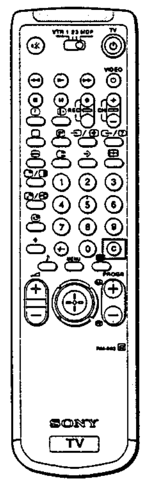
To unblock
Select the channel to unblock in the "PARENTAL LOCK" menu. Press the joystick. The symbol 🔒 disappears.

Tuning in a Channel Temporarily

You can tune in to a channel temporarily, even though it has not been preset.



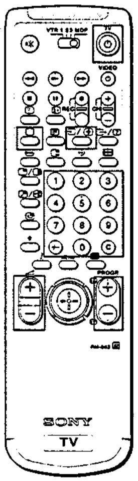
1 Press C on the Remote Commander. For cable channels, press C twice.
The indication "C" ("S" for cable channels) appears on the screen.
2 Enter the double-digit channel number using the number buttons (e.g. for channel 4, first press 0, then 4).
The channel appears. Note that the channel will not be stored.



Note
After you tune in a channel temporarily, you cannot enter the manual preset mode.
To store the channel, refer to the "Presetting Channels Manually" on page 10.

Operating Instructions

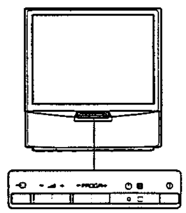
Watching the TV



If no picture appears when you depress ⏻ on the TV and if the standby indicator on the TV is lit, the TV is in standby mode.
Press ◯, PROGR+/– or one of the number buttons to switch it on.

This section explains the basic functions you use while watching the TV. Most operations are done using the Remote Commander.

Switching the TV on and off



Switching on

Depress ⏻ on the TV.

Switching off temporarily

Press ⏻ on the Remote Commander.
The TV enters standby mode and the standby indicator on the front of the TV lights up in red.

To switch on again

Press ◯, PROGR +/–, or one of the number buttons on the Remote Commander.

Switching off completely

Depress ⏻ on the TV and the indicator on the front of the TV lights up in amber.

To save energy, we recommend you switch off your TV completely when the TV is not in use.

Selecting TV Programmes

Press PROGR +/– or press the number buttons.

To select a double-digit number

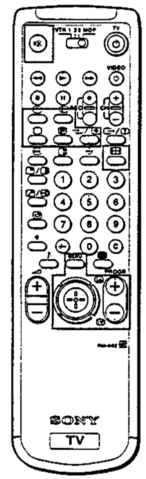
Press -/--, then the numbers.
For example, if you want to choose 23, press -/--, 2 and 3.

Adjusting the Volume

Press ◢ +/–.

Operating the TV Using the Buttons on the TV

To select the programme number, press the PROGR +/– buttons.
To adjust the volume, press the ◢ +/– buttons.
To select the video input picture, press the ⇥ button.

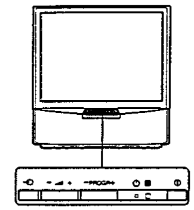


For details of the teletext operation, refer to page 18.

For details of the video input picture, refer to page 21.

GB

Watching Teletext or Video Input



Watching teletext

1 Press ⊜ to view the teletext.
2 For teletext operation, enter a 3-digit page number with the number buttons to select a page.
For fastext operation, push the joystick to the colour mark which corresponds to the colour-coded menu.
For both operations, press ⊞ (PAGE +) for the next page or ⊟ (PAGE –) for the preceding page.
3 To go back to the normal TV picture, press ◯.

Watching a video input picture

1 Press ⇥ repeatedly until the desired video input appears.
2 To go back to the normal TV picture, press ◯.

More Convenient Functions

Displaying the on screen indications

Press ⊡ to display the indications.
Press again to make the indications disappear.

Muting the sound

Press 🔇.
To resume normal sound, press 🔇 again.

Displaying the time

Press ⊘. This function is available only when teletext is broadcast.
To make the time display disappear, press ⊘ again.

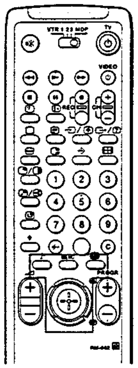
Viewing the programmes in 16:9 mode

Press ⊞.
Press again to return to 4:3 mode.

Adjusting and Setting the TV Using the Menu

PICTURE CONTROL

SOUND CONTROL



Adjusting the Picture and Sound

Although the picture and sound are adjusted at the factory, you can adjust them to suit your own taste. You can also select dual sound (bilingual) programmes when available or adjust the sound for listening with the headphones.

1 Press ● (for picture) or ♪ (for sound) on the Remote Commander.

or

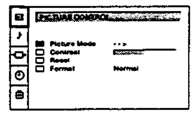
Press MENU and select the symbol ▣ for Picture Control or ♪ for Sound Control. Push to yellow to confirm.
The PICTURE CONTROL or SOUND CONTROL menu appears.

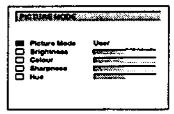
2 Push the joystick to blue or green to select the desired item. Push to yellow to confirm.
The selected item changes its colour.

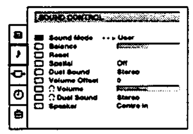
3 Push to red or yellow to adjust the selected item. Press the joystick to confirm.
For the effect of each control, see the table below.

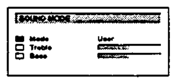
4 Repeat steps 2 and 3 to adjust other items.

5 Press MENU to restore the normal TV picture.









Effect of each control

PICTURE CONTROL	Effect
Picture Mode	User ←→ Game ←→ Movie ←→ Sports ←→ Live
Brightness	Darker ——+—— Brighter
Colour	Less ——+—— More
Sharpness	Softer ——+—— Sharper
Hue	Greenish ——+—— Reddish
Contrast	Less ——+—— More
Reset	Resets picture to the factory preset levels.
Format	4:3: normal 16:9: wide screen effect

Note
HUE is available for NTSC colour systems only.

Note on LINE OUT
The dual sound mode output from the ⊖ jack on the rear corresponds to the Headphones Dual Sound settings.

When watching a video input source with stereo sound
You can select Dual Sound to change the sound.

When "User" is selected in "Picture Mode"

You can preset Brightness, Colour, Sharpness and Hue (NTSC signals only) as follows:

1 Push the joystick to blue or green to select the desired item. Push to yellow to confirm.

2 Push to red or yellow to adjust. Press the joystick to confirm.

3 Push to red to return to the PICTURE CONTROL menu.

GB

SOUND CONTROL	Effect
Sound Mode	Choice between different sound effects User ←→ Rock ←→ Jazz ←→ Pop
Treble	Less ——+—— More
Bass	Less ——+—— More
Balance	More left ——+—— More right
Reset	Resets sound to the factory preset levels.
Spatial	Off: normal On: acoustic sound effect
Dual Sound	A: left channel B: right channel Stereo → Mono The selected mode of the A-◯-B indicator on the TV lights up.
Volume Offset	Presets the volume level for individual programmes. –12 ——+—— 12
∩ Volume	Less ——+—— More
∩ Dual Sound	A: channel 1 → B: channel 2 Stereo → Mono
Speaker	Main: sound from TV set Centre in: sound from external amplifier

When "User" is selected in "Sound Mode"

You can preset Treble and Bass as follows:

1 Push the joystick to blue or green to select the desired item. Push to yellow to confirm.

2 Push to red or yellow to adjust. Press the joystick to confirm.

3 Push to red to return to the PICTURE CONTROL menu.

TIMER

Using the Sleep Timer

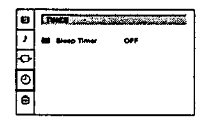
You can select a time period after which the TV automatically switches into standby mode.

1 Press MENU.

2 Push the joystick to blue or green to select the symbol ⊙ on the menu screen. Push to yellow to confirm.

3 Push to yellow. Push to red or yellow to set time delay and press the joystick to confirm.
OFF←→0:30←→1:00←→1:30.........3:30←→4:00

4 Press the joystick to confirm.
One minute before the TV switches into standby mode, a message is displayed on the screen.

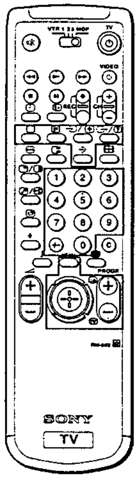


To switch off the timer
Select "OFF" in step 3.

To check the remaining time
Press ⊕.

To go back to the normal TV picture
Press MENU.

Teletext



Note
Teletext errors may occur if the broadcasting signals are weak.

TV stations broadcast an information service called Teletext via the TV channels.Teletext service allows you to receive various information pages such as weather reports or news at any time you want.

Direct Access Functions

Switching Teletext on and off

1 Select the TV channel which carries the teletext broadcast you want to watch.
2 Press ⊜ to switch on teletext.
A teletext page will be displayed (usually the index page).
If there is no teletext broadcast, the indication P100 is displayed on a black screen.
3 Input three digits for the page number using the number buttons.
If you have made a mistake, type in any three digits. Then re-enter the correct page number.
4 Press ▭ to return to the normal TV picture.

Accessing next or preceding page

Press ⊕ (PAGE+) or ⊖ (PAGE–).
The next or preceding page appears.

Superimposing the teletext display on the TV programme

- Press ⊜ once to get Teletext only.
- Press ⊜ twice for Mix mode.

The normal TV screen and the Teletext screen are overlapped.

Preventing a teletext page from being updated

- Press ⊕.

The symbol "⊕" is displayed on the information line.
Press again to cancel.

- Press ⊜ to resume normal teletext reception.

Revealing hidden information (e.g. for a quiz)

Sometimes pages contain concealed information, such as answers to a quiz. The reveal option lets you disclose the information.
Press ⊙. Press again to cancel.
Press ⊜ to resume normal teletext reception.

GB

Favourite page system

You can store up to four of your favourite teletext pages per Teletext service. In this way you have quick access to the pages you frequently use.

Storing pages

1 Use the number buttons to select the page you would like to store.
2 Press ⟐ twice.
The colour prompts at the bottom of the screen flash.
3 Push the joystick to the desired colour to store the selected page.
The page is now stored on this colour.

Repeat steps 1 to 3 for the other 3 pages.

Displaying the favourite pages

1 Press ⟐.
2 Push the joystick to the colour on which the desired page is stored.

Make sure you press ⟐, otherwise the normal Fastext facility operates.

Using Fastext

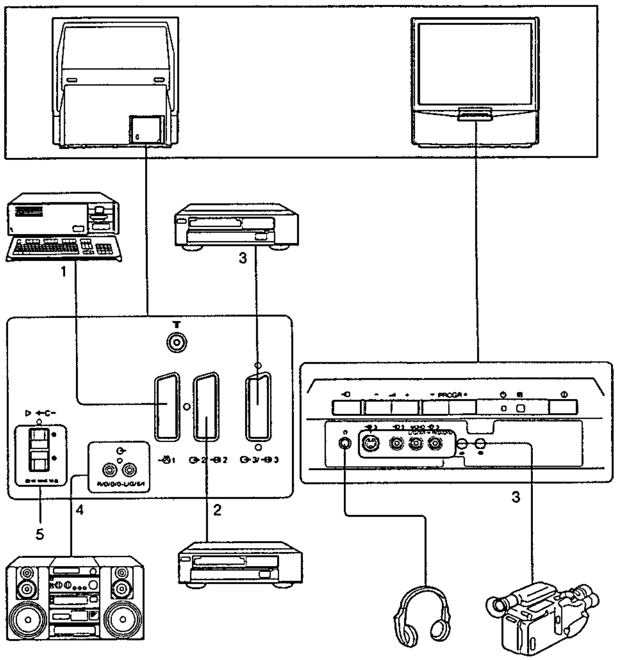
Note
Fastext operation is possible, only when the TV station broadcasts Fastext signals.

With Fastext you can access pages with one key stroke.
When a Fastext page is broadcast, a colour-coded menu will appear at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue positions on the Remote Commander.
Push the joystick to the colour mark which corresponds to the colour-coded menu. The page will be displayed after a few seconds.

Connecting and Operating Optional Equipment

Connecting Optional Equipment

You can connect optional audio-video equipment to this TV such as a VCR, video disc player, and stereo system.



To connect a VCR using the Ƭ terminal
Connect the aerial output of the VCR to the aerial terminal Ƭ of the TV.
We recommend that you tune in the video signal to programme number "0". For details, see "Presetting Channels Manually" on page 10.

If the picture or the sound is distorted
Move the VCR away from the TV.

About S video inputs (Y/C input)
Video signals can be separated into Y (luminance or brightness) and C (chrominance) signals.
Separating the Y and C signals prevents them from interfering with one another, therefore it improves picture quality (especially luminance).
This TV is equipped with 3 S Video input jacks, through which these separated signals can be input directly.

When connecting a monaural VCR
Connect only the white -⊃ jack to both the TV and VCR.

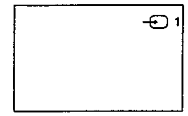
Note
When you connect the equipment to the -Ⓢ3/-⊃3/-⊃3 connectors on the front panel and ⊂-3/-Ⓢ3 connector on the rear panel, turn off the power of the equipment not in use.

	Acceptable input signal	Available output signal
1	Normal audio/video and RGB signal	Video/audio from TV tuner
2	Normal audio/video and S video signal	Video/audio from selected source
3	Normal audio/video and S video signal Normal audio/video and S video signal	No outputs Video/audio from selected source (the same output source as the ⊂-2/-Ⓢ2 connector)
4	No inputs	Audio signal
5	Centre speaker input Set "Speaker" on the SOUND CONTROL menu to "Centre in".	No outputs

Selecting Input and Output

GB

This section explains how to view the video input picture (of the video source connected to your TV), and how to select the output signal using direct access buttons or the menu system.

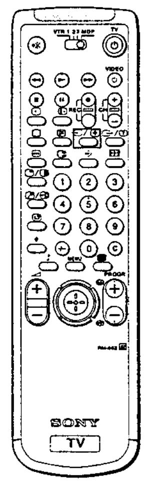


Selecting input

Press -⊃ repeatedly to select the input source.
The symbol of the selected input source will appear.

To go back to the normal TV picture
Press ▢.

Selecting input with PROGR +/– or number buttons
You can preset video input sources to the programme positions so that you can select them with PROGR +/– or number buttons. For details, see "Presetting Channels Manually" on page 10.



Input modes

Symbol	Input signal
-⊃ 1	Audio/video input through the -⊡ 1 connector
-⊡	Audio/RGB input through the -⊡ 1 connector
-⊃ 2	Audio/video input through the ⊂- 2/-Ⓢ2 connector
-Ⓢ2	Audio/S video input through the ⊂- 2/-Ⓢ2 connector
-⊃ 3	Audio/video input through -⊃ 3 and -⊃ 3 connectors on the front or ⊂- 3/-Ⓢ3 connector on the rear
-Ⓢ3	Audio/S video input through the -Ⓢ3 connector (4-pin connector) on the front or ⊂- 3/-Ⓢ3 connector on the rear

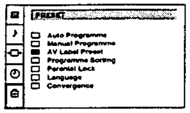
You can also select the input mode using the -⊃ button on the TV.

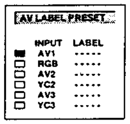
AV LABEL PRESET

Using AV Label Preset

Using this function you can preset the desired input source (e.g. -⊙ 1, RGB signal) to the respective AV input (AV 1 -⊙). In this way, a connected VCR will automatically switch to the RGB signal.

1 Press MENU.
2 Push the joystick to blue or green to select the symbol ⊟ on the menu screen. Push to yellow to confirm.
3 Push to blue or green to select "AV Label Preset". Push to yellow.
4 Push to blue or green to select the desired input source. Push to yellow to confirm.
5 Push to blue or green to select a letter or number. Push to yellow (select "-" for a blank).
Select the other four characters in the same way.
6 After selecting all the characters, press the joystick to confirm.
7 Repeat steps 4 to 6 to label other input sources.
8 Press the MENU button to return to the normal TV picture.



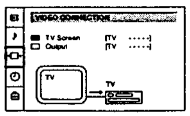


VIDEO CONNECTION

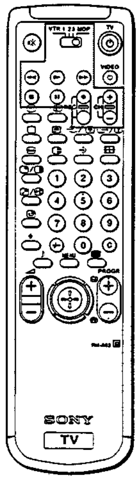
Checking and Selecting the Input and Output Sources Using the Menu

You can display the menu to see which input sources are selected for the TV screen, as well as which output source is selected. You can also select them on the menu display.

1 Press MENU.
2 Push the joystick to blue or green to select the symbol -□- on the menu screen. Push to yellow to confirm.
The VIDEO CONNECTION menu appears.
You can see which source is selected for the TV and for the output.
If you want to select the input and output on this menu, go on to the next step.
3 Push to blue or green to select "TV Screen" (input source for TV-screen), or "Output" (output source for ⊖ 2/-⊙ 2 and ⊖ 3/-⊙ 3).
Push to yellow to confirm.
4 Push to red or yellow to select the desired source. Press joystick to store.
5 Repeat steps 3 to 4 to select the source for other inputs or outputs.
6 Press MENU to return to the normal TV picture.



Note
If you select "AUTO" for output, the output source automatically becomes the same as the desired input source.



When recording
When you use the ● (record) button, make sure to press this button and the one to the right of it simultaneously.

Remote Control of Other Sony Equipment

GB

You can use the TV Remote Commander to control most of Sony remote-controlled video equipment: beta, 8 mm and VHS VCRs and video disc players.

Tuning the Remote Commander to the equipment

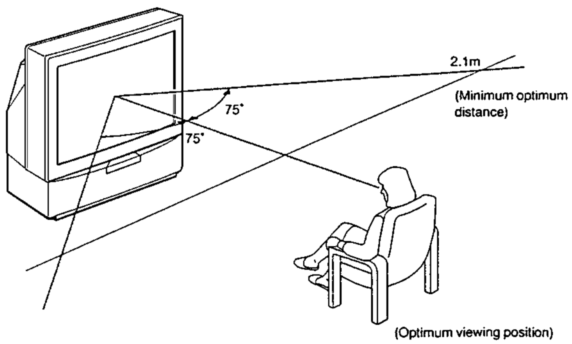
1 Set the VTR 1/2/3 MDP selector according to the equipment you want to control:
VTR1: Beta VCR
VTR2: 8 mm VCR
VTR3: VHS VCR
MDP: Video disc player
2 Use the buttons indicated in the illustration to operate the additional equipment.
If your video equipment is furnished with a COMMAND MODE selector, set this selector to the same position as the VTR 1/2/3 MDP selector on the TV Remote Commander.
If the equipment does not have a certain function, the corresponding button on the Remote Commander will not operate.

For Your Information

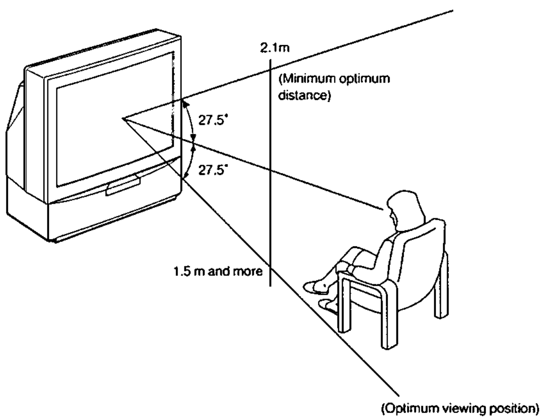
Optimum Viewing Area

For the best picture quality, try to position the projection TV so that you can view the screen from within the areas shown below.

Horizontal viewing area



Vertical viewing area



Troubleshooting

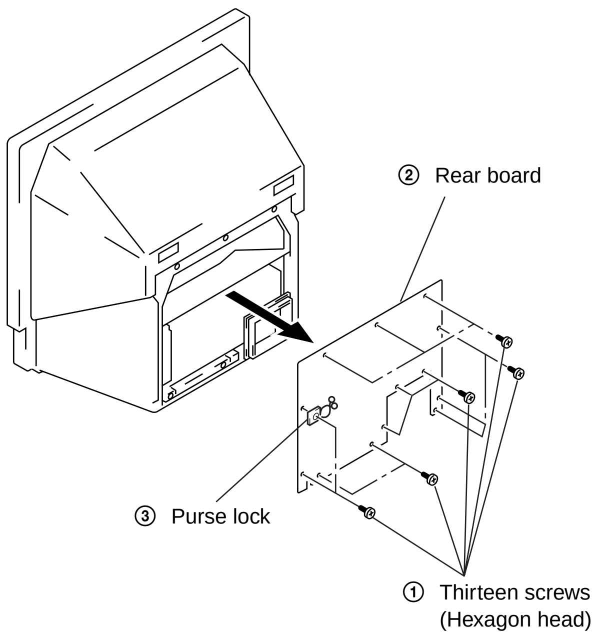
Here are some simple solutions to some problems which may affect the picture and sound.

Problem	Solution
No picture (screen is dark), no sound	• Plug in the TV in. • Press ⏼ on the TV (if ⏻ indicator is on, press ▭ or a programme number on the Remote Commander). • Check the aerial connection. • Check if the selected video source is on. • Turn the TV off for 3 or 4 seconds then turn it on again using ⏼ .
Poor or no picture (screen is dark), but good sound	• Press ⬤ to enter the PICTURE CONTROL menu and adjust the brightness, contrast and colour.
The menu and picture disappear (if contrast and brightness are minimum)	• Press MENU on the Remote Commander or on the front panel of the TV set.
Good picture but no sound	• Press ⊿ +. • Check if " Center in " is selected on the SOUND CONTROL menu. • If 🔇 is displayed on the screen, press 🔇 .
No colour for colour programmes	• Press ⬤ to enter the PICTURE CONTROL menu, select RESET, then press the joystick to confirm.
Remote Commander does not function	• The batteries are weak.

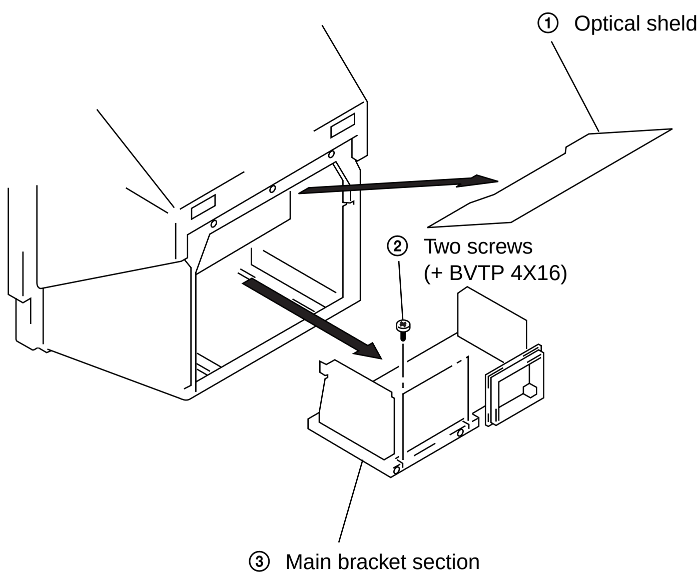
If you continue to have problems, have your TV serviced by qualified personnel. Never open the casing yourself.

SECTION 2
DISASSEMBLY

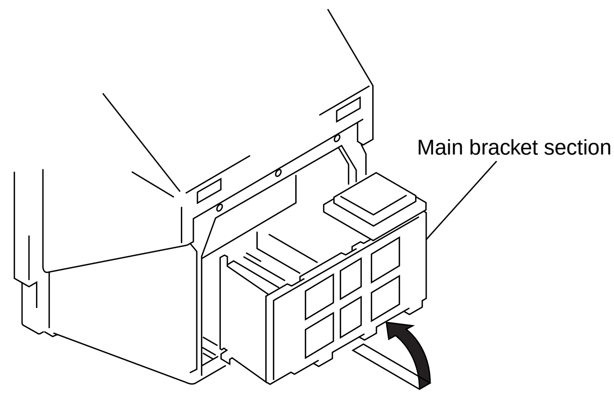
2-1. REAR BOARD REMOVAL



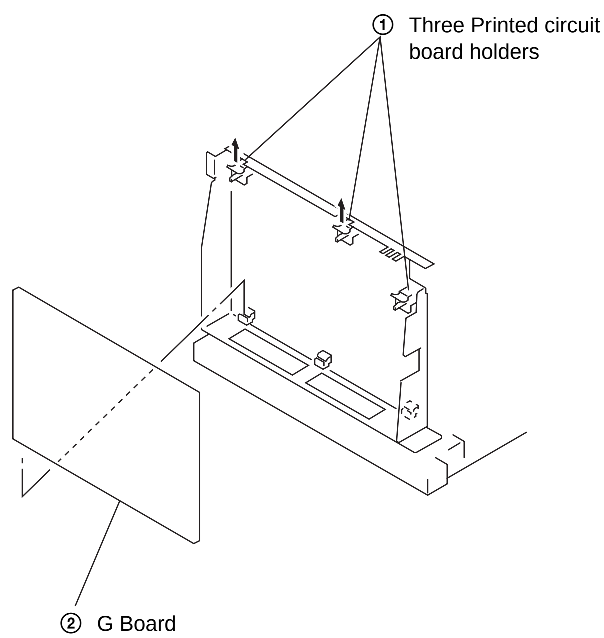
2-2. MAIN BRACKET SECTION REMOVAL



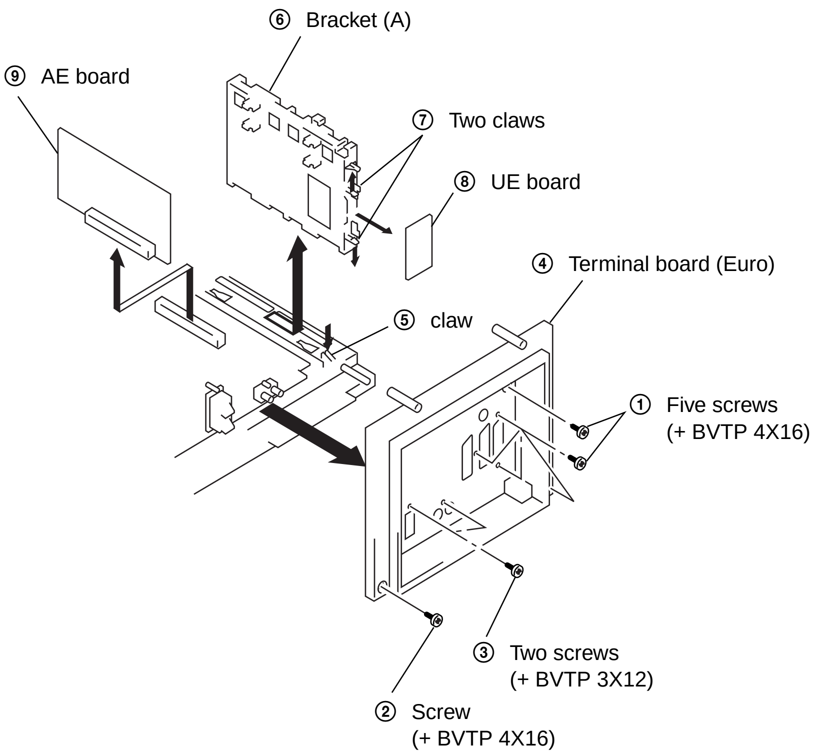
2-3. SERVICE POSITION



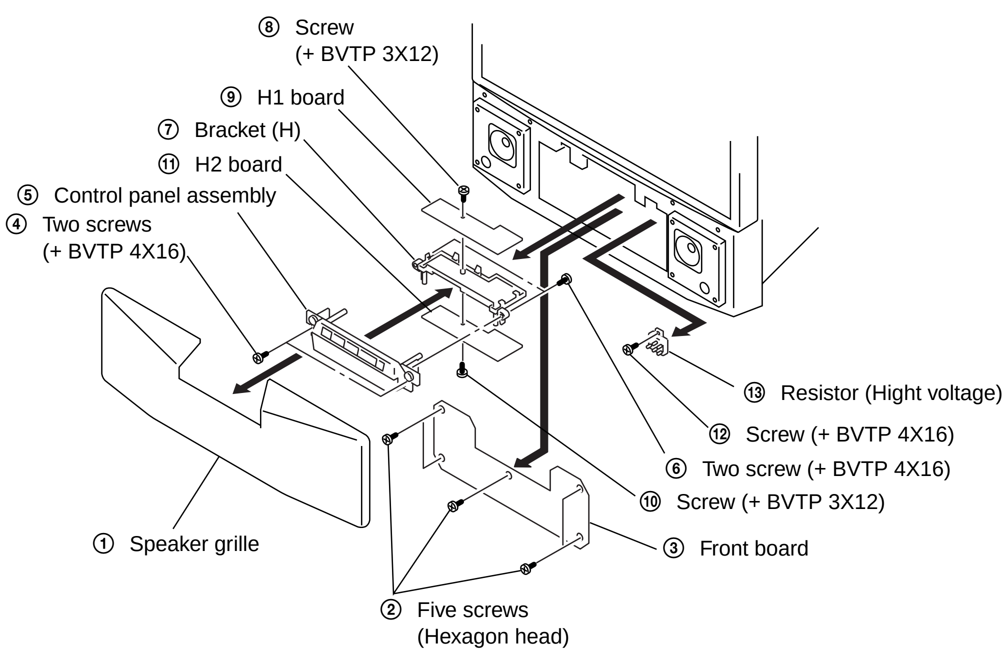
2-4. G BOARD REMOVAL



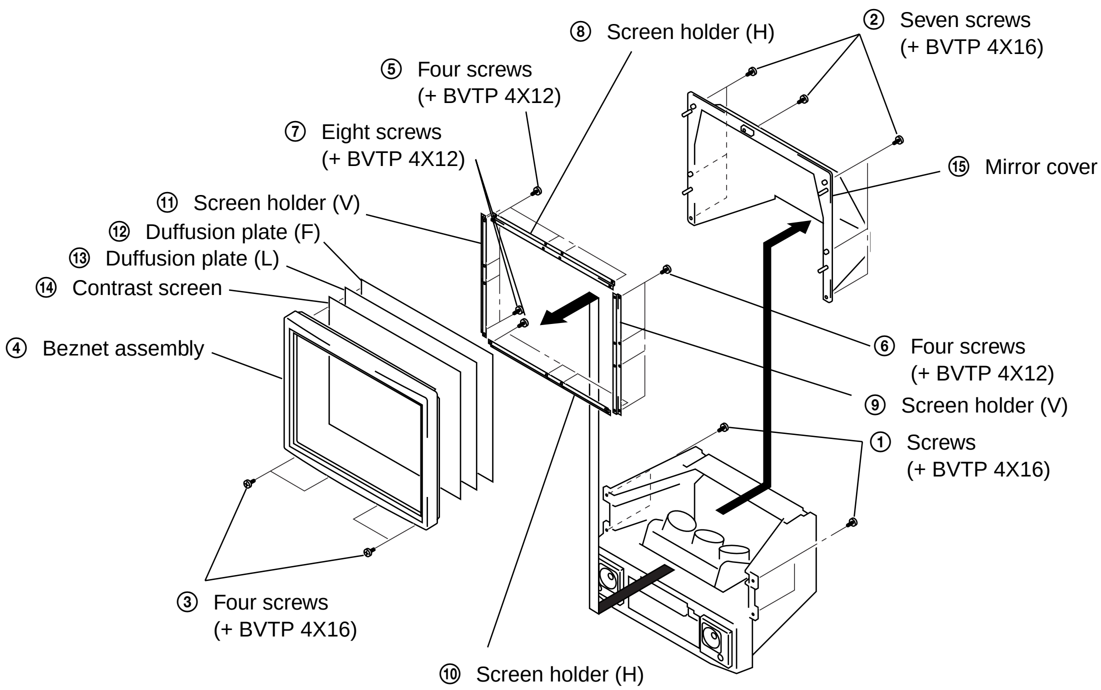
2-5. AE BOARD AND UE BOARD REMOVAL



2-6. H1 BOARD, H2 BOARD AND RESISTOR (HIGHT VOLTAGE) REMOVAL

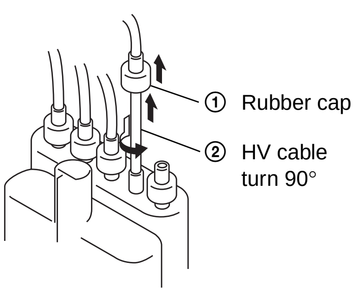


2-7. BEZNET SECTION REMOVAL

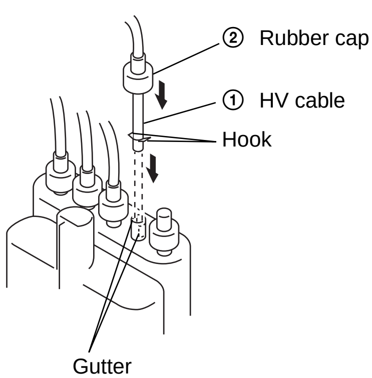


2-8. HIGH-VOLTAGE CABLE INSTALLATION AND REMOVAL

(1) Removal

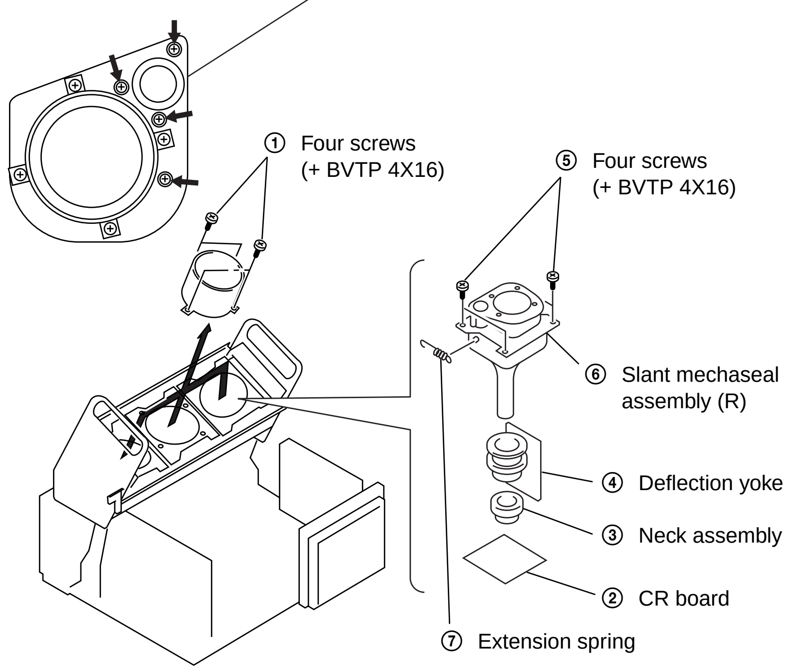


(2) Installation



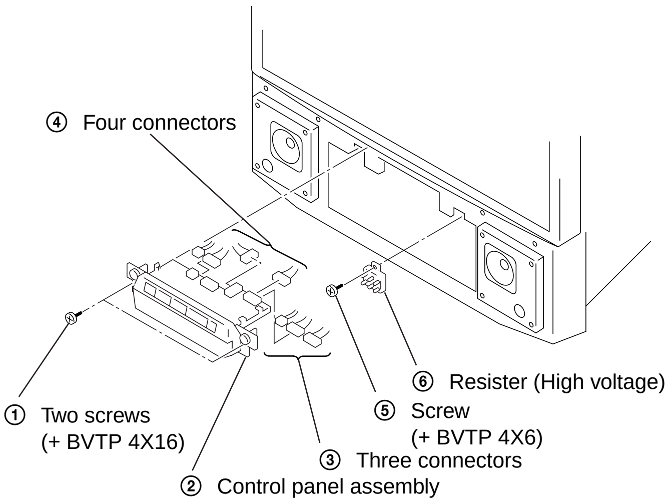
2-9. SLANT MECHASEAL ASSEMBLY REMOVAL

Removing the arrow-marked screw is strictly inhibited.
If removed, it may cause liquid spill

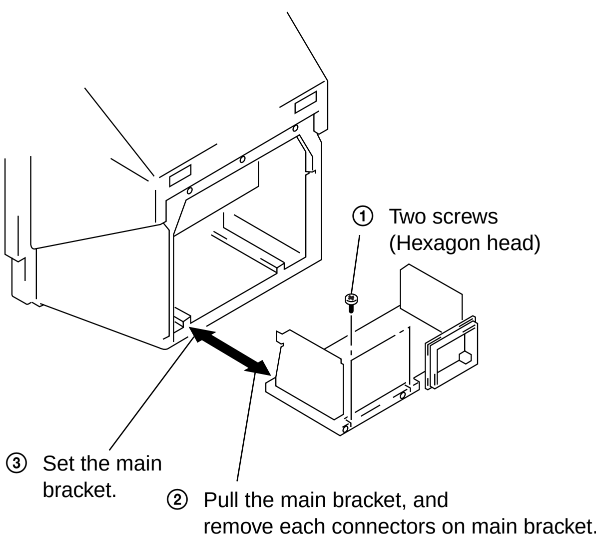


2-10. CHASSIS BLOCK REMOVAL

(1) H1, H2 BOARDS AND AND RESISTOR REMOVAL

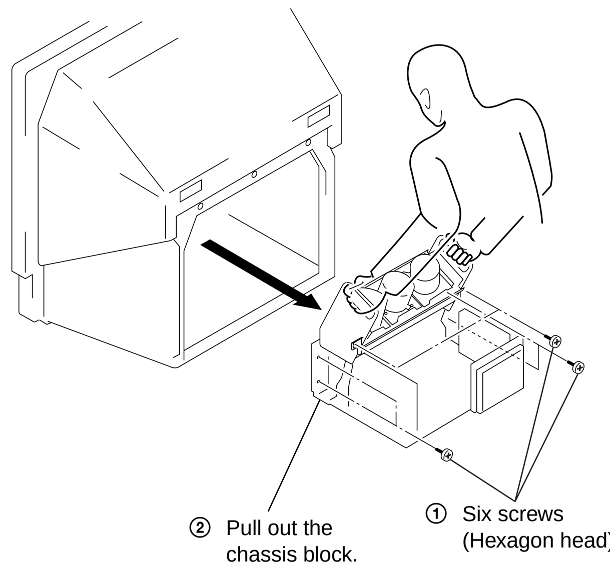


(2) MAIN BRACKET REMOVAL



※ Pay particular attention to the wires of each Printed circuit boards when puling out the main bracket.

(3) CHASSIS BLOCK REMOVAL



※ Pull out the chassis block by gripping the handles as shown in the diagram.
At this time, pay particular attention to the components removed in (1).

SECTION 3
SET-UP ADJUSTMENTS

3-1. SCREEN VOLTAGE ADJUSTMENT (ROUGH ALIGNMENT)

1. Receive the Monoscope signal.
2. Set 50% BRIGHTNESS and minimum PICTURE.
3. Turn the red VR on the FOCUS block all the way to the left and then gradually turn it to the right until the point where you can see the retrace line.
4. Next gradually turn it to the left to the position where the retrace line disappears.

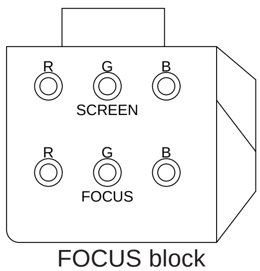


Fig. 3-1

3-2. FOCUS LENS ADJUSTMENT

1. Loose the lens screw.
2. Set in service mode.
3. Use GH (GSEL) on the service mode menu to shown only the green color.
4. Press the Commander Menu button and select TEST MENU and CONVERGENCE to display the test signal (crosshatch) on the screen.
5. Rotate the green lens and align with the optimal focus point from the test signal.
6. Use GH (GSEL) from the service mode menu to set to green and red.
7. Output the test signal and rotate the red lens to obtain the optimum focus at the point where the red and green spots overlap.
8. Use BH (BSEL) from the service mode menu to set to red and blue.
9. Output the test signal and rotate the blue lens to obtain the optimum focus at the point where the blue and red spots overlap.
10. Tighten the lens screw.

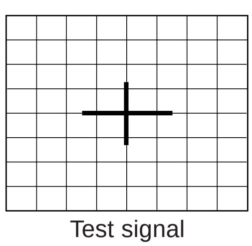


Fig. 3-2

3-3. SCREEN (G2) ADJUSTMENT

1. Connect jig (A) to 200V. In TP732, CG Board.
2. Connect jig (B) to GND. In TP733, CG Board.
3. Select with Power ON, VIDEO mode without signals.
4. Connect jig (C) to the TP701 (K.CR), TP731 (K:CG), or TP761 (K.CB) of CR, CG, and CB Board.
5. Adjust R, G, and B screen voltage to until retrace line just appears with screen VR on the Focus block

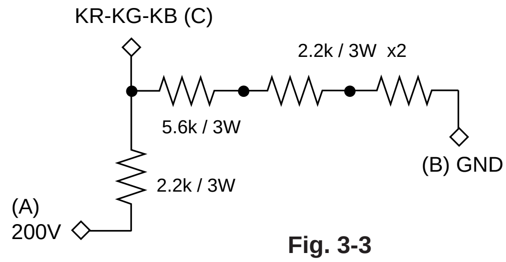


Fig. 3-3

3-4. FOCUS VR ADJUSTMENT

1. Set in service mode.
2. Use GH (GSEL) on the service mode menu to shown only the green color.
3. Press the Commander Menu button (convergence) and output the test signal (crosshach).
4. Rotate the green VR on the FOCUS block and align to obtain the optimal focus point.
5. Use GH (GSEL) from the service mode menu to set to green and red.
6. Output the test signal and rotate the red VR to obtain the optimum focus at the point where the red and green spots overlap.
7. Use BH (BSEL) from the service mode menu to set to red and blue.
8. Output the test signal and rotate the blue VR aligning to obtain the optimum focus at the point where the blue and green spots overlap.

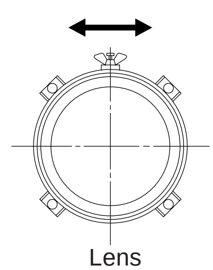


Fig. 3-4

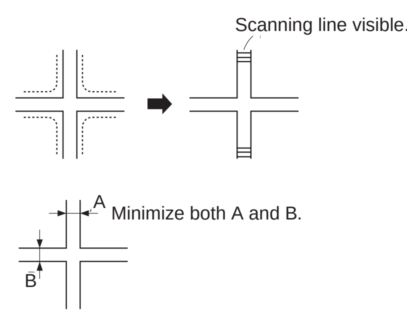
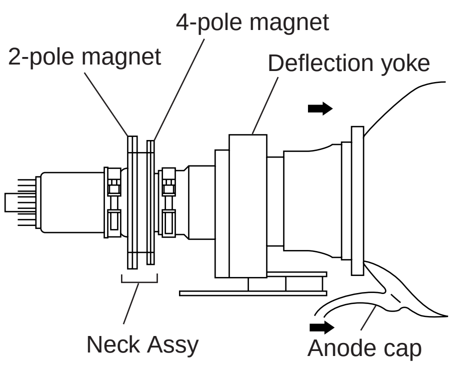


Fig. 3-5

3-5. DEFLECTION YOKE TILT ADJUSTMENT

1. Set to receive the Monoscope signal.
2. Set in service mode.
3. Place the caps on the red and blue lens so that only the green color.
4. Loosen the deflection yoke setscrew and align the tilt of the Deflection Yoke so that the bars at the center of the monoscope pattern are horizontal.
5. After aligning the deflection yoke, fasten it securely to the funnel-shaped portion (neck) of the CRT.
6. The tilt of the deflection yoke for red and Blue is aligned the same as was done for green.



Deflection yoke should be as more close to CRT as possible.

Fig. 3-6

3-6. 2-POLE MAGNET ADJUSTMENT

1. Set in service mode.
2. Set to receive the Dot signal.
3. Place the caps on the red and blue lens so that only the green color is shown.
4. Turn the green VR on the focus block to the right and set to overfocus to enlarge the spot.
5. Now align the 2-Pole Magnet so that the enlarged spot is in the center of the Just Focus spot.
6. Align the green focus VR and set for just (precise) focus.
7. Perform the same alignment for red and blue.

Use the center dot

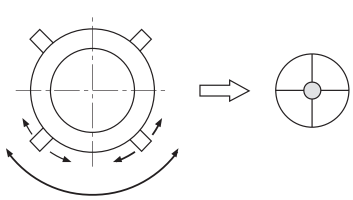


Fig. 3-7

3-7. 4-POLE MAGNET ADJUSTMENT

1. Set in service mode.
2. Set to receive the Dot signal.
3. Place the caps on the red and blue lens so that only the green color is shown.
4. Turn the green VR on the focus block to the left and set to underfocus to enlarge the spot.
5. Now align the 4-Pole Magnet so that the enlarged spot becomes a perfect circle.
6. Perform the same alignment for red and blue.

Use the center dot

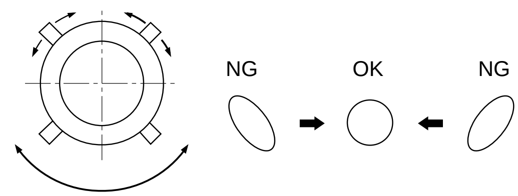


Fig. 3-8

3-8. DEFOCUS ADJUSTMENT (Blue)

1. Receive the Dot signal.
2. Place the caps on the red and green lens so that only the blue color is shown.
3. Rotate the blue focus volume on the focus pack and adjust to obtain best electrical focus.
4. Rotate Blue focus volume of focus pack clocwise, so that diameter of the Dot see Caution.

[How to Blue defocus.]

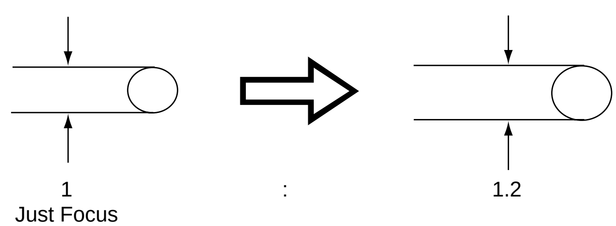


Fig. 3-9

[Change Blue Defocus]

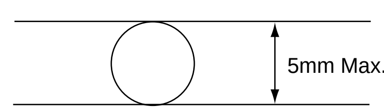


Fig. 3-10

SECTION 4
SAFETY RELATED ADJUSTMENT

When replacing the following components marked with ◪ on the schematic diagram, always check hold-down voltage and if necessary re-adjust.

Part Replaced (⧓)
R1

Part Replaced (◪)					
E Board	C515,	C516,	C554,	D504,	D507,
	L506,	Q502,	R1,	R514,	R516,
	R517,	T502,	T504 (FBT)		
G Board	IC6008				

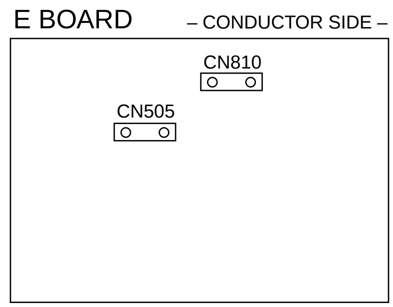


Fig. 4-3

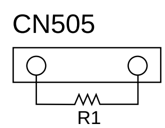


Fig. 4-4

4-1. HV HOLD-DOWN ADJUSTMENT

1. Remove CN810. Connect HV meter to HV Block.
2. Connect External Power Supply to CN810 ② pin (+135V) and ① pin (GND).

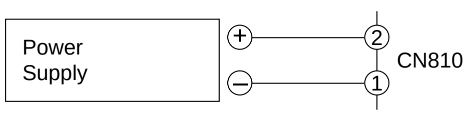


Fig. 4-1

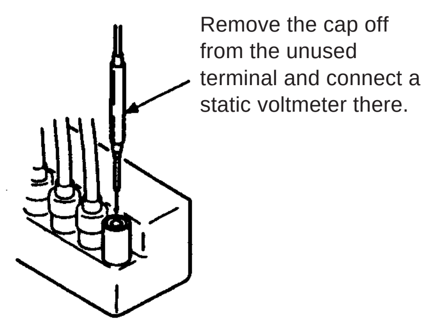


Fig. 4-2

3. Turn on the set.
4. Slowly up the supply voltage from 0V to 135V.
5. Receive dot picture and set PICTURE/BRIGHTNESS to minimum.
6. Slowly up the voltage until hold-down circuit works (picture disappear).
7. Read the HV meter of peak HV voltage.
   Spec: 34.5±0.75KV
8. If Hold-down voltage is less than 33.75KV then solder R1=820K.
9. If hold-down voltage is over than 35.25KV then take-off R514 and solder R1=9.1K.

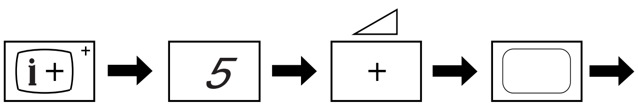
SECTION 5
CIRCUIT ADJUSTMENTS

5-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can performed with the supplied remote commander RM-862.

HOW TO ENTER INTO SERVICE MODE

1. Turn on the main power switch of the set and enter into standby mode.
2. Press the following sequcnce of buttons on the Remote Commander.



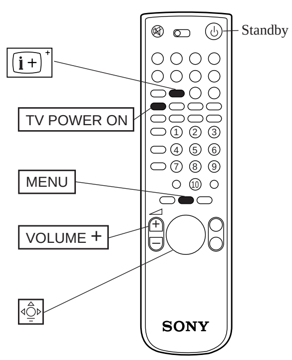
(ON SCREEN DISPLAY) (DIGIT 5) (VOLUME +) (TV)

"TT—" will appear in the top right comer of the screen. Other status information wull also be displayed.

3. Press MENU on the commander to obtain the following menu on the screen.

TEST MENU

> picture adjustment
Geometry
Wide
MSP
IC status
Current TV status
Convergence



RM-862

4. Move to the correspondind adjustment using the button on the commander.
5. Move the button to the right to enter the selected adjustment.
6. Before TURN OFF is neccessary:
   DATA WRITE, DATA COPY in 4 : 3 and 16 : 9 mode.
7. Turn off the power to quit the service mode when adjustments are completed.

PICTURE ADJUSTMENT

AFC mode	2
REF position	2
SCP BGR	1
SCP BGF	1
Trap Fo	0
Sub contrast	Adj
Sub colour	Adj
Sub brightness	Adj
Green drive	Adj
Blue drive	Adj
Green cutoff	Adj
Blue cutoff	Adj
Gamma	0
Pre / overshoot	0
Y delay	3

GEOMETRY ADJUSTMENT in 4 : 3 mode

UP Corn Pin	Adj	*
V Size	Adj	*
V Position	Adj	*
S Correction	Adj	*
V Linearity	Adj	*
H Size	Adj	*
H Position	Adj	*
Pin Amp	Adj	*
Pin Phase	Adj	*
AFC Bow	Adj	*
AFC Angle	Adj	*
EHT V	Adj	*
EHT H	Adj	*
Corner Pin	Adj	*
LO Corn Pin	Adj	*

*: Adjust only if AE board change.
For change CRT R-G-B is better CONVERGENCE don't change in 16 : 9 mode.

WIDE

V Aspect	47
V Scroll	31
Upper V Lin	0
Lower V Lin	0
Left Blanking	1
Right Blanking	11

IC STATUS (CXA2076 / CXA2040)

CXA2076	
H lock	1
IKR	1
VNG	0
X•RAY	0
Colour system	3
CV1 Sync	0
CXA2040	
Sync sep	1
S1 mode pin	01
S2 mode pin	01
TUNER	
Tuner status	01101011

CURRENT TV STATUS

Text system	C TEXT / TV TEXT
Dolby	NO / YES
Text language set	WEST / EAST / RUSSIAN
Menu language set	WEST / EAST / RUSSIAN
Destination	B / D / U / K / L / E / A / R
Scart 16 : 9	OFF / ON
RGB priority	OFF / ON
Ageing	OFF / ON
Size	PJ
Colour trap sw	SECAM / ALL
Velocity mod	ON / OFF
AFT STATUS	WINDOW / HIGH / LOW
Lumisponder Mode	OFF

MSP

AGC ON / OFF	ON
Constant gain CDB	1
FM prescale FMP	36
Zwei mono-st WHI	36
Zwei st-mono WLO	18
Zwei mono-bi WMH	36
Zwei bi-mono WLO	18
Time zwei WML	41
Fawct limit	10
Fawct soll init FAW	12
Fawer tol	2
Nicam Err Max CCT	10
Nicam Err Min	0
Nicam Prescale NIP	97
Time Nicam	31
Carrier mute CRM	OFF
Audio clock ACO	HIZ
Scart prescale	25
Scart volume	64
NICAM Prescale I	127
NICAM Prescale L	97
NICAM Prescale BG	97
NICAM Prescale DK	97

5-2. SERVICE LIST

OSD

	Item number	Adjustment Item	Data range	Initial data	Name / Description	Device
OSD	00	CHSW	0, 1	0	HATCH DISPLAY 0 : Disp, Hatch 1 : No Disp, Hatch	
	01	OSDH	1 ~ 32	10	OSD H Position	
	02	OSDV	1 ~ 32	10	OSD V Position	
	03	VMRK	0, 1	0	V SIZE MARKER ON / OFF (cannot write to NVM)	

SFT

	Item number	Adjustment Item	Data range	Initial data	Name / Description	Device
SFT	00	SFTE	0, 1	1	SHIFT ENABLE 0 : Disable 1 : Enable	
	01	SFTF	0, 1	0	SHIFT FAST 0 : Normal 1 : Quick (cannot write to NVM)	

DP

	Item number	Adjustment Item	Data range	Initial data	Name / Description	Device
GH	00	GSEL	0, 1	0	OSD SELECT FOR GH, GV 0 : Green+Red 1 : Green	CXP86213
	01	CENT	–127 ~ +127	0	GREEN H CENTER	
	02	SKEW	–127 ~ +127	0	GREEN H SKEW	
	03	BOW	–127 ~ +127	0	GREEN H BOW	
	04	4 BOW	–127 ~ +127	0	GREEN H 4th BOW	
	05	SIZE	–127 ~ +127	0	GREEN H SIZE	
	06	LIN	–127 ~ +127	0	GREEN H LINEARITY	
	07	M SIZ	–127 ~ +127	0	GREEN H MID SIZE	
	08	M LIN	–127 ~ +127	0	GREEN H MID LINEARITY	
	09	KEY	–127 ~ +127	0	GREEN H KEYSTONE	
	10	SSKW	–127 ~ +127	0	GREEN H SUB SKEW	
	11	M PIN	–127 ~ +127	15	GREEN H MID PINCUSHION	
	12	PIN	–127 ~ +127	–12	GREEN H PINCUSHION	
	13	S BOW	–127 ~ +127	8	GREEN H SUB BOW	
	14	M BOW	–127 ~ +127	0	GREEN H MID BOW	
	15	4PIN	–127 ~ +127	0	GREEN H 4th PINCUSHION	
	16	4 SBOW	–127 ~ +127	0	GREEN H 4th SUB BOW	
GV	00	CENT	–127 ~ +127	0	GREEN V CENTER	
	01	SKEW	–127 ~ +127	0	GREEN V SKEW	
	02	BOW	–127 ~ +127	0	GREEN V BOW	
	03	SIZE	–127 ~ +127	0	GREEN V SIZE	
	04	LIN	–127 ~ +127	0	GREEN V LINEARITY	
	05	M SIZ	–127 ~ +127	0	GREEN V MID SIZE	
	06	M KEY	–127 ~ +127	0	GREEN V MID KEYSTONE	
	07	KEY	–127 ~ +127	0	GREEN V KEYSTONE	
	08	S SKW	–127 ~ +127	0	GREEN V SUB SKEW	
	09	M PIN	–127 ~ +127	0	GREEN V MID PINCUSHION	
	10	PIN	–127 ~ +127	20	GREEN V PINCUSHION	
	11	S BOW	–127 ~ +127	16	GREEN V SUB BOW	
	12	WAVE	–127 ~ +127	0	GREEN V WAVE	
	13	4PIN	–127 ~ +127	25	GREEN V 4th PINCUSHION	

	Item number	Adjustment Item	Data range	Initial data	Name / Description	Device
RH	00	CENT	–95~ +96	0	RED H CENTER	CXP86213
	01	SKEW	–95~ +96	0	RED H SKEW	
	02	BOW	–127 ~ +127	0	RED H BOW	
	03	4BOW	–127 ~ +127	0	RED H 4th BOW	
	04	SIZE	–127 ~ +127	25	RED H SIZE	
	05	LIN	–127 ~ +127	10	RED H LINEARITY	
	06	MSIZ	–127 ~ +127	30	RED H MID SIZE	
	07	MLIN	–127 ~ +127	–30	RED H MID LINEARTIY	
	08	KEY	–127 ~ +127	0	RED H KEYSTONE	
	09	SSKW	–127 ~ +127	0	RED H SUB SKEW	
	10	MPIN	–127 ~ +127	0	RED H MID PINCUSHON	
	11	PIN	–127 ~ +127	–10	RED H PINCUSHON	
	12	SBOW	–127 ~ +127	40	RED H SUB BOW	
	13	MBOW	–127 ~ +127	12	RED H MID BOW	
	14	4PIN	–127 ~ +127	0	RED H 4th PINCUSHON	
	15	4SBOW	–127 ~ +127	0	RED H 4th SUB BOW	
RV	00	CENT	–95~ +96	–10	RED V CENTER	
	01	SKEW	–95~ +96	0	RED V SKEW	
	02	BOW	–127 ~ +127	4	RED V BOW	
	03	SIZE	–127 ~ +127	0	RED V SIZE	
	04	LIN	–127 ~ +127	0	RED V LINEARITY	
	05	MSIZ	–127 ~ +127	0	RED V MID SIZE	
	06	MKEY	–127 ~ +127	10	RED V MID KEYSTONE	
	07	KEY	–127 ~ +127	–10	RED V KEYSTONE	
	08	SSKW	–127 ~ +127	10	RED V SUB SKEW	
	09	MPIN	–127 ~ +127	0	RED V MID PINCUSHON	
	10	PIN	–127 ~ +127	10	RED V PINCUSHON	
	11	SBOW	–127 ~ +127	16	RED V SUB BOW	
	12	WAVE	–127 ~ +127	30	RED V WAVE	
	13	4PIN	–127 ~ +127	10	RED V 4th PINCUSHON	
	14	MWAV	–31 ~ +31	0	MID WAVE	
BH	00	BSEL	0, 1	0	OSD SELECT FOR BH, BV 0 : Blue + Green 1 : Blue + Red	
	01	CENT	–95~ +96	0	BLUE H CENTER	
	02	SKEW	–95~ +96	0	BLUE H SKEW	
	03	BOW	–127 ~ +127	0	BLUE H BOW	
	04	4BOW	–127 ~ +127	0	BLUE H 4th BOW	
	05	SIZE	–127 ~ +127	–25	BLUE H SIZE	
	06	LIN	–127 ~ +127	–10	BLUE H LINEARITY	
	07	MSIZ	–127 ~ +127	30	BLUE H MID SIZE	
	08	MLIN	–127 ~ +127	30	BLUE H MID LINEARTIY	
	09	KEY	–127 ~ +127	0	BLUE H KEYSTONE	
	10	SSKW	–127 ~ +127	0	BLUE H SUB SKEW	
	11	MPIN	–127 ~ +127	0	BLUE H MID PINCUSHON	
	12	PIN	–127 ~ +127	–10	BLUE H PINCUSHON	
	13	SBOW	–127 ~ +127	–40	BLUE H SUB BOW	
	14	MBOW	–127 ~ +127	–16	BLUE H MID BOW	
	15	4PIN	–127 ~ +127	0	BLUE H 4th PINCUSHON	
	16	4SBOW	–127 ~ +127	0	BLUE H 4th SUB BOW	

	Item number	Adjustment Item	Data range	Initial data	Name / Description	Device
BV	00	CENT	–95~ +96	–10	BLUE V CENTER	CXP86213
	01	SKEW	–95~ +96	0	BLUE V SKEW	
	02	BOW	–127 ~ +127	0	BLUE V BOW	
	03	SIZE	–127 ~ +127	0	BLUE V SIZE	
	04	LIN	–127 ~ +127	0	BLUE V LINEARITY	
	05	MSIZ	–127 ~ +127	0	BLUE V MID SIZE	
	06	MKEY	–127 ~ +127	–10	BLUE V MID KEYSTONE	
	07	KEY	–127 ~ +127	10	BLUE V KEYSTONE	
	08	SSKW	–127 ~ +127	–10	BLUE V SUB SKEW	
	09	MPIN	–127 ~ +127	0	BLUE V MID PINCUSHON	
	10	PIN	–127 ~ +127	10	BLUE V PINCUSHON	
	11	SBOW	–127 ~ +127	32	BLUE V SUB BOW	
	12	WAVE	–127 ~ +127	–30	BLUE V WAVE	
	13	4PIN	–127 ~ +127	10	BLUE V 4th PINCUSHON	
	14	MWAV	–31 ~ +31	0	MID WAVE	

ACV

	Item number	Adjustment Item	Data range	Initial data	Name / Description	Device
ACV	00	ART0	1~ 8	6	DATA SAMPLE LENGTH (1 step = 1 microsec.)	
	01	AT1T	0~ 255	18	Data Sampling Start Time	
	02	AT1M	0~ 255	132	from V BLK (50Hz)	
	03	AT1B	0~ 255	240	(1 step = 64 µsec = approx. 1H)	
	04	AH51	0~ 255	18	(1 step = 1 OSD step) OSD H POS 50 (L&R)	
	05	AH52	0~ 255	130	OSD H POS 50 (UP&BOTTOM)	
	06	AV5T	0~ 255	1	(1 step = 2 lines) OSD V POS 50 (UP)	
	07	AV5M	0~ 255	60	OSD V POS 50 (L&R)	
	08	AV5B	0~ 255	130	OSD V POS 50 (BOTTOM)	
	09	AH61	0~ 255	18	(1 step = 1 OSD step) OSD H POS 60 (L&R)	
	10	AH62	0~ 255	130	OSD H POS 60 (BOTTOM)	
	11	AV6T	0~ 255	1	(1 step = 2 lines) OSD V POS 50 (UP)	
	12	AV6M	0~ 255	46	OSD V POS 50 (L&R)	
	13	AV6B	0~ 255	100	OSD V POS 50 (BOTTOM)	
	14	RHCO	–127 ~ +127	0	(8 step = 1 step) RH CENT ADJ OFFSET	
	15	BHCO	–127 ~ +127	0	BH CENT ADJ OFFSET	
	16	RVCO	–127 ~ +127	0	RV CENT ADJ OFFSET	
	17	BVCO	–127 ~ +127	0	BV CENT ADJ OFFSET	
	18	RHSO	–127 ~ +127	0	RH SKEW ADJ OFFSET	
	19	BHSO	–127 ~ +127	0	BH SKEW ADJ OFFSET	
	20	RVSO	–127 ~ +127	0	RV SKEW ADJ OFFSET	
	21	BVSO	–127 ~ +127	0	BV SKEW ADJ OFFSET	
	22	AERR	0~ 255	0	(see Error Code List)	

MSC

	Item number	Adjustment Item	Data range	Initial data	Name / Description	Device
MSC	00	ACTL	0~ 255	0	Lower byte of counter value	
	01	ACTH	0~ 255	0	Higher byte of counter value	

5-3. REGISTRATION (CONVERGENCE) ADJUSTMENT METHOD

PAL REGISTRATION ADJUSTMENT

1) Receive the PAL SPCB signal.
2) Select Service mode and enter adjustment items for Green signal.

With the joystick:

⬆⬇ Items change

⬅ ➡ Data change

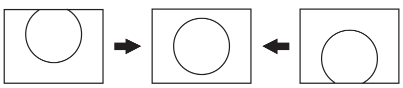
In internal pattern it appears only RG or G only.

ITEM	CHSW	01	External pattern
	CHSW	00	Internal pattern

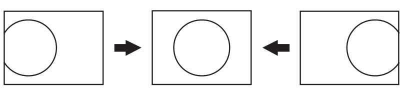
CENTER ADJUSTMENT

1) Adjust GH and GV CENT.

GV CENT



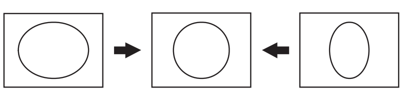
GH CENT



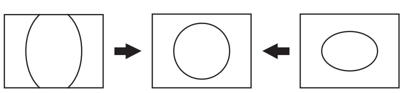
SIZE ADJUSTMENT

SPEC : H-SIZE 16.4 +/- 0.15 Sq.
V-SIZE 12.3 +/-0.15Sq.

VSP HSIZE



VSP VSIZE



5-4. GEOMETRY

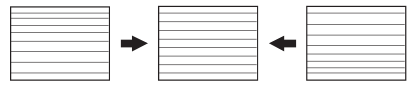
Before adjust GEOMETRY, sure the data in convergence.

- GH SIZE = 0
- GV SIZE = 0
- Adjust S correction

MAIN DEFLECTION ADJUSTMENT

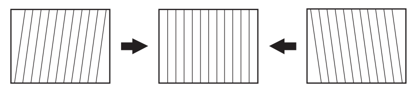
1) Adjust VSP V-Lin.
Correct linearity of the horizontal top and bottom lines.

VSP VLINE



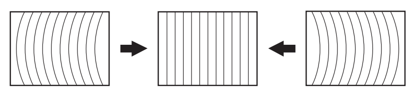
2) Adjust AFC ANGLE
Correct the vertical center line to be in parailel with the screen edges and other colors.

AFC ANGLE



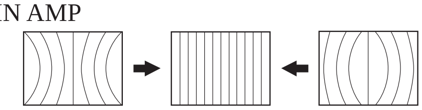
3) Adjust AFC BOW
Correct linearity of the vertical center line.

AFC BOW



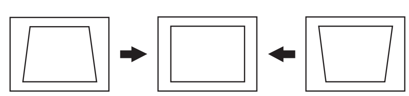
4) Adjust PIN AMP
Correct the vertical left and right lines and eliminute pin-cushion-shaped distortion.

PIN AMP



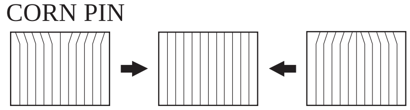
5) Adjust PIN PHASE
Correct the vertical left and right lines to be in parallel with each other.

PIN PHASE



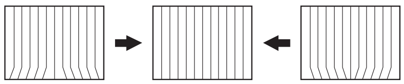
6) Adjust UP CORN PIN
Correct the screen top section line bow.

UP CORN PIN



7) Adjust LO CORN PIN
Correct the screen bottom section line bow.

LO CORN PIN



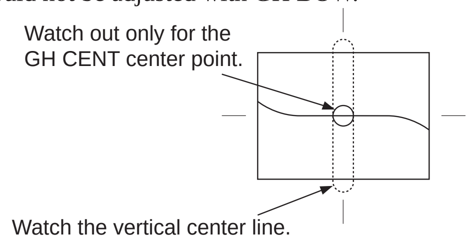
SUB DEFLECTION ADJUSTMENT ITEM

Adjustment O : Yes – : No

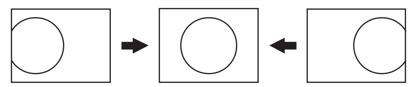
Display	Adjustment item	Adjustment type					
		GH	GV	RH	RV	BH	BV
BSEL	COL SELECT	–	–	–	–	O	–
CENT	CENT	O	O	O	O	O	O
SKEW	SKEW	O	O	O	O	O	O
BOW	BOW	O	O	O	O	O	O
4BOW	4TH BOW	O	–	O	–	O	–
SIZE	SIZE	O	O	O	O	O	O
LIN	LIN	O	O	O	O	O	O
MSIZ	MID SIZE	O	O	O	O	O	O
MLIN	MID LIN	O	O	O	–	O	–
MKEY	MID KEY	–	O	–	O	–	O
KEY	KEY	O	O	O	O	O	O
SSKW	SUB SKEW	O	O	O	O	O	O
MPIN	MID PIN	O	O	O	O	O	O
PIN	PIN	O	O	O	O	O	O
SBOW	SUB BOW	O	O	O	O	O	O
WAVE	WAVE	–	O	–	O	–	O
MBOW	MID BOW	O	–	O	–	O	–
4PIN	4TH PIN	O	O	O	O	O	O
4SBOW	4TH SUB BOW	O	–	O	–	O	–

VERTICAL LINE ADJUSTMENT
MENU → Convergence

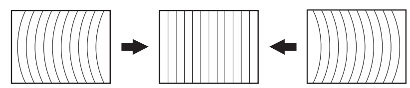
1. Carefully watching out for the GH CENT screen centre section, adjust GH CENT, GH BOW, GH SKEW.
2. GH 4th Bow adjustment. Correct the corner distortion which could not be adjusted with GH BOW.



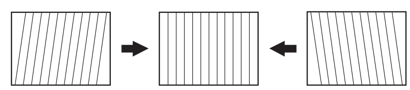
GH CENT



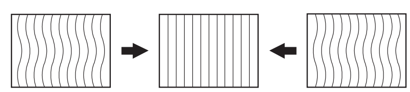
GH BOW



GH SKEW

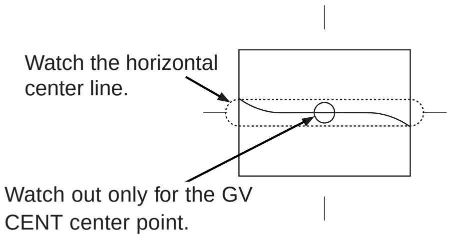


GH 4BOW

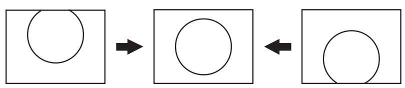


HORIZONTAL LINE ADJUSTMENT

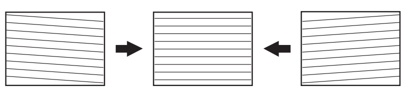
1. Finely adjust the centre position of the vertical line at the centre of the screen with GV CENT.
2. Using GV SKEW and GV BOW, correct the tilt and bow of the horizontal line at the centre of the screen.



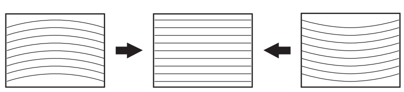
GV CENT



GV SKEW

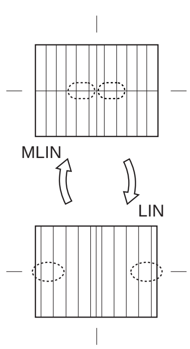


GV BOW



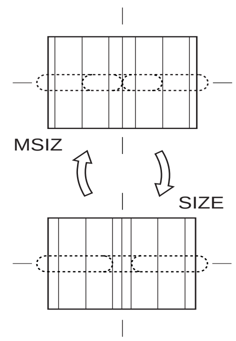
SIZE AND LINEARITY ADJUSTMENT

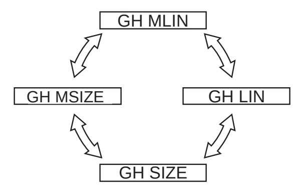
1. Balance the sizes at both sides of the centre section of the screen with GH MLIN.
2. Balance the sizes on both end sections of the screen with GH LIN.
3. While tracking, adjust with GH MLIN and GH LIN so that the sizes of the horizontal line at the centre of the screen are symmetrical left and right.



HORIZONTAL SIZE ADJUSTMENT

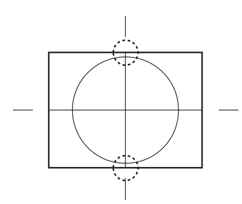
1. Adjust with GH MSIZE, so that the sizes of both edges and centre are equal.
2. Adjust with GH SIZE, so that the horizontal sizes of both edges and centre are equal.
3. While tracking adjust GH MSIZE and GH SIZE so that the space intervals for the horizontal section of the screen are equal.
4. Adjust again if M LIN is changed after GH MSIZE and GH SIZE are complete.





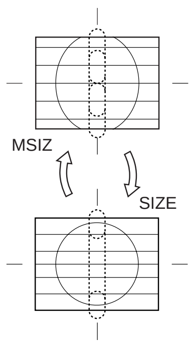
GREEN VERTICAL LINEARITY ADJUSTMENT

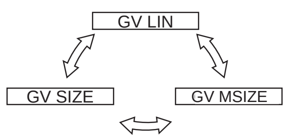
1. Adjust GV LIN so that the vertical lines at the top and bottom of the screen are symmetrical.



GREEN VERTICAL SIZE ADJUSTMENT

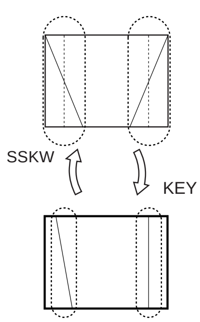
1. Adjust GV MSIZE so that the sizes at the top and bottom and centre are equal.
2. Set the vertical size to correct specification.
3. While tracking adjust GV MSIZE and GV SIZE so that the space intervals for the vertical line of the screen are equal, also the vertical size should be within space.
4. Adjust again if GV L IN has been altered after completing the above adjustments.





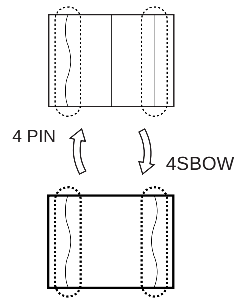
GREEN HORIZONTAL TRAPEZOIDAL DISTORTION ADJUSTMENT

1. Adjust GH SSKW so that the tilt of the vertical lines at both edges of the screen are symmetrical left and right.
2. Adjust GH KEY so that there is no tilt in the vertical lines at both edges of the screen.
3. While tracking adjust GH KEY and GH SSKW.



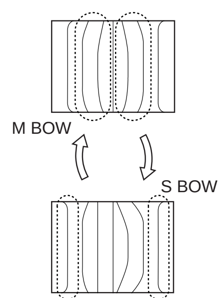
GREEN HORIZONTAL QUATERNARY ADJUSTMENT

1. Adjust GH 4PIN, to correct the 4th order distortion.
2. Adjust GH 4SBO to balance and correct the 4th order distortion at both edges of the screen.
3. While tracking adjust GH 4PIN and GH 4SBOW.



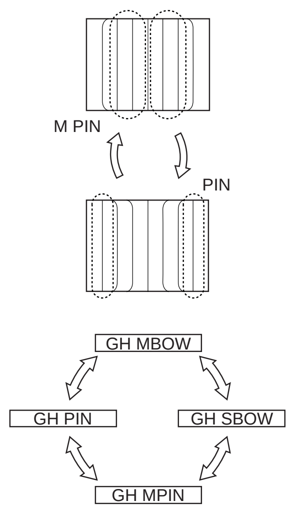
GREEN HORIZONTAL ASYMMETRICAL PIN DISTORTION ADJUSTMENT

1. Adjust GH MBOW, so that the pin asymmetry at both sides of the centre section are symmetrical left and right.
2. Adjust GH SBOW so that the bow at both edges of the screen is symmetrical left and right.
3. While tracking adjust GH MBOW and GH SBOW so that the bow of vertical lines over the entire screen is symmetrical.



GREEN HORIZONTAL SYMMETRICAL PIN DISTORTION ADJUSTMENT

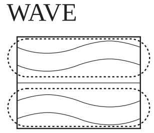
1. Adjust GH MPIN to correct pin distorton at both edges of the centre section.
2. Use GH PIN to correct pin distortion at both edges of the screen.
3. While tracking adjust GH MPIN and GH PIN so that the PIN of vertical lines on the entire screen have no bowing.
4. If there is asymmetrical distortion after adjustments, re-adjust GH MBOW and GH SBOW while tracking.



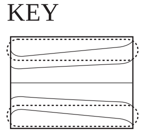
GREEN VERTICAL WAVE (3RD-ORDER) DISTORTION ADJUSTMENT

1. Check the screen at the top & bottom, and look for any 2nd or 3rd order waveform distortion of horizontal lines. Correct with GV WAVE.
2. While tracking adjust GV WAVE and GV KEY, if here are any KEY distortion.

GV WAVE



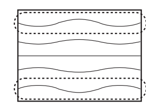
GV KEY



GREEN VERTICAL 4TH ORDER DISTORTION ADJUSTMENT

1. By using GV 4 PIN, 4th-Order distortion of the horizontal lines at the top & bottom can be corrected.
   Since there is no 4SBO for vertical correction, there will be a slight imbalnace, but adjust the registration to eleiminate any distortion.

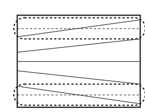
GV 4PIN

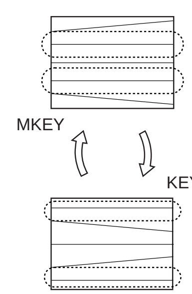


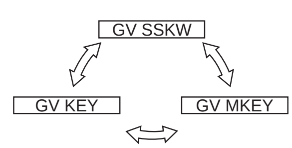
GREEN VERTICAL TRAPEZOIDAL DISTORTION ADJUSTMENT

1. Adjust GV SSKW so that the tilt of the horizontal lines at the top and bottom of the screen are symmetrical.
2. Adjust GV MKEY so that there is no tilt for the middle section.
3. Adjust GV KEY so that there is no tilt at the top and bottom of the screen.
4. While tracking adjust GV MKEY and GV KEY, so that there is no tilt over the entire screen.
5. If the tilt is unbalanced after GV MKEY and GV KEY have been adjusted, readjust GV SSKW.

GV SSKW



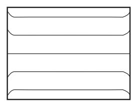




GREEN VERTICAL ASYMMETRICAL PIN DISTORTION (2ND-ORDER DISTORTION) ADJUSTMENT

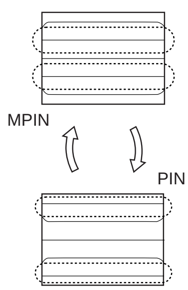
1. Correct the asymmetrical pin distortion at the top and bottom of the screen with GV SBOW.

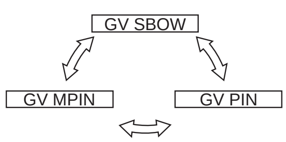
GV SBOW



GREEN VERTICAL ASYMMETRICAL PIN DISTORTION ADJUSTMENT

1. Using GV MPIN adjust the pin distortion at both edges of the screen and at the centre.
2. Using GV PIN, adjust, so that the horizontal lines at the top & bottom of the screen are straight lines.
3. Adjust GV MPIN & GV PIN so that there is no curve in the horizontal lines on the entire screen.
4. After adjusting the items above, using tracking with GV SBOW. GV MPIN, and GV PIN to correct the entire screen.





GREEN AND RED REGISTRATION ADJUSTMENT

1. Receive a PAL cross-hatch signal.
2. Adjust so that the red lines lay on the green lines.
   Adjust, using the same procedure as the GREEN SUB adjustment outline above.

Note : Main registration correction should not be while adjusting Red adjustment.
BEWARE : Not to change Green Sub Items It's easily done by mistake.

GREEN AND BLUE ADJUSTMENT

1. Adjust so that the blue and green lines are on top of each other.

Note : Main registration correction should not be while adjusting Blue adjustment.
BEWARE : Not to change Green & Red Sub Items.
It' s easily done by mistake.

REGISTRATION DATA WRITE

* Points to bear in mind :
  There are two independent modes of pictures 4 : 3 MODE and 16 : 9 MODE

1. Once REGISTRATION 4 : 3 has been adjusted
   Press "Mute" + 0 >"Data Write"
   (write data in NVM)
   Press "On screen disp." + 0 >"WRT 5060" Pal to NTSC
   (write data Pal/Secam to NTSC)
   If 2 + 0 is pressed (Data copy) it is recording data from 4 : 3 to 16 : 9 mode.
   So it should be adjusted in 16 : 9 mode.

2. Adjust REGISTRATION in 16 : 9 mode.
   Press "Mute" + 0 >"Data Write"
   (write data in NVM)
   Press "On screen disp." + 0 >"WRT 5060"Pal to NTSC
   (write Pal/Secam to NTSC)
3. Once REGISTRATION has been adjusted in both modes (4 : 3 and 16 : 9)
   a) With picture go into service mode
   b) Press TT and "autoconvergence" button in control panel and wait for the adjusting

* Make sure input signal is PAL. If input signal is NTSC and do this process, NTSC data are copied to PAL data!

5-5. AGC ADJUSTMENT

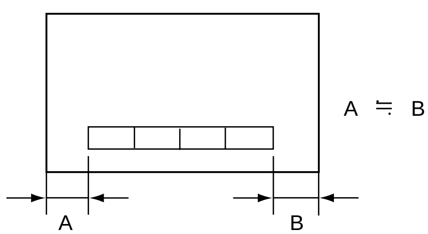
1. Receive an off-air signal.
2. Adjust the AGC VR (IF 1001) so that there is no snow noise and cross-modulation.

5-6. WHITE BALANCE ADJUSTMENT

1. Receive the monoscope signal and adjust the picture quality with the menu.
2. Adjust service mode S-BRIGHT so that the signal 10 IRE section barely glows.
3. Receive the all-white pattern signal.
4. Adjust the white balance with service mode G-CUTOFF and B-CUTOFF.
5. Adjust service mode S-BRIGHT so that the signal 100 IRE section barely glows.
6. Adjust the white balance with service mode G-DRIVE and B-DRIVE.
7. Repeatedly adjust the white balance for the minimum and maximum picture settings.

5-7. TEXT POSITION ADJUSTMENT

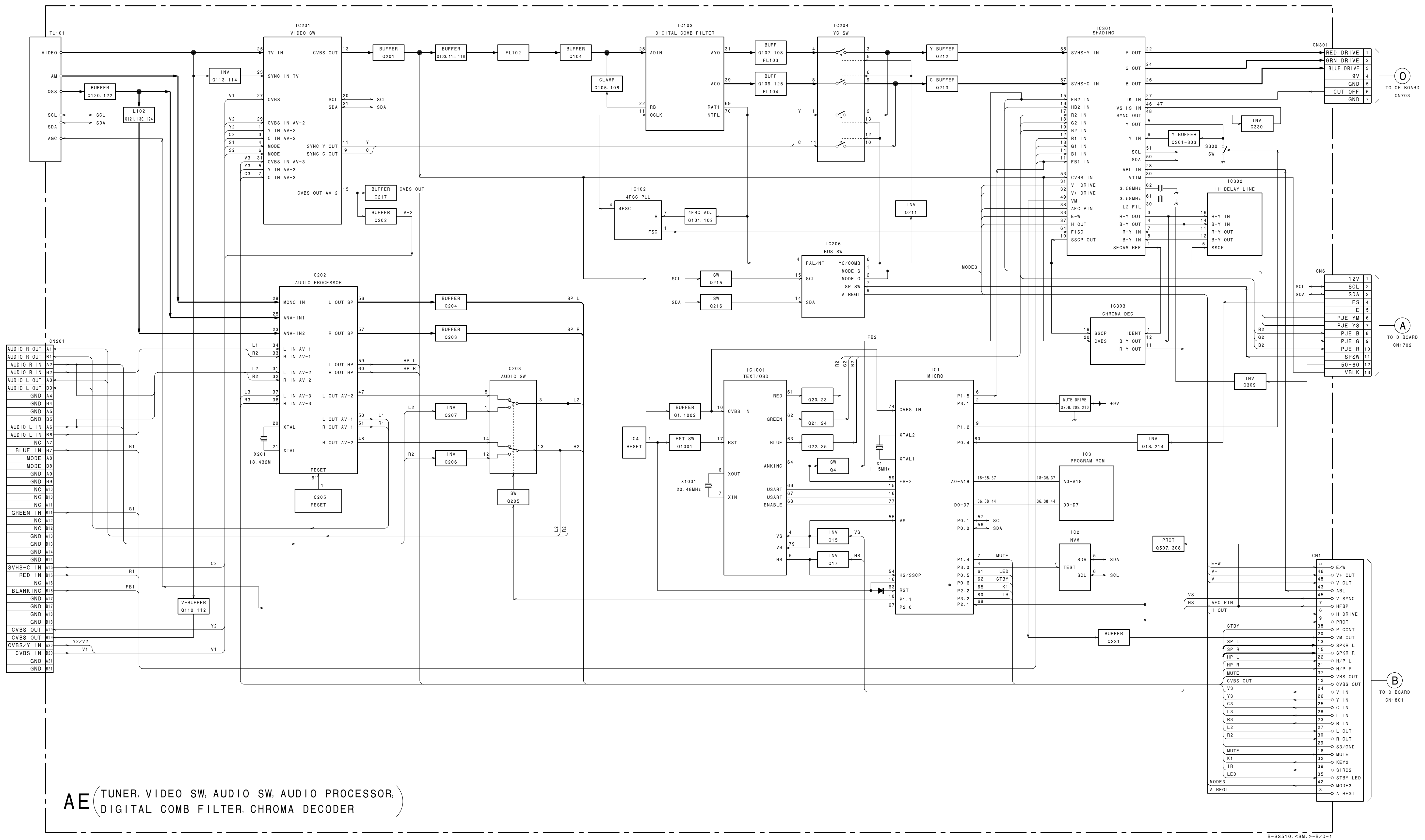
1. Receive RF signal with text.
2. Press TT74 (Text H position adjustment) of Test commander.
3. Adjust H Position of Text.

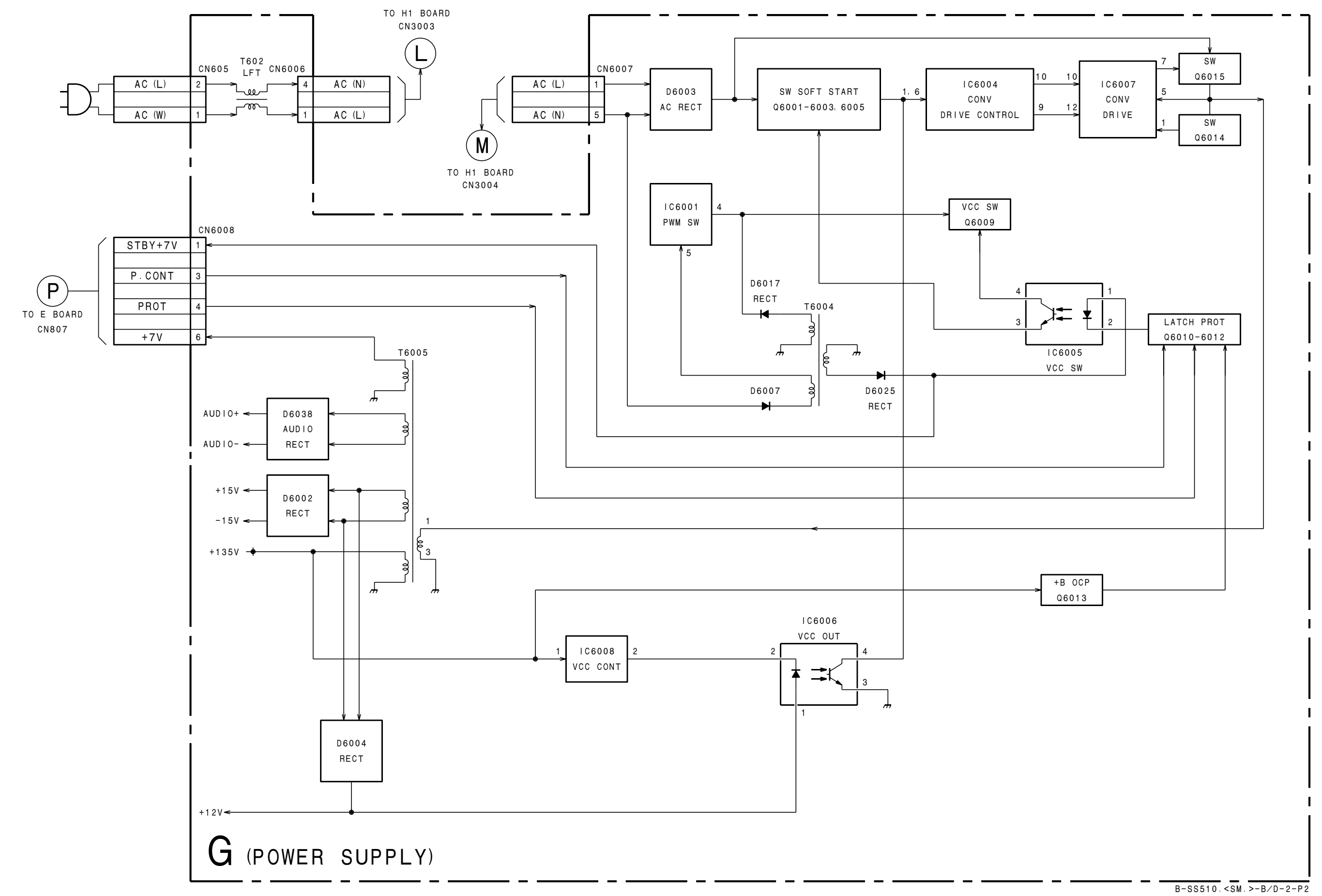


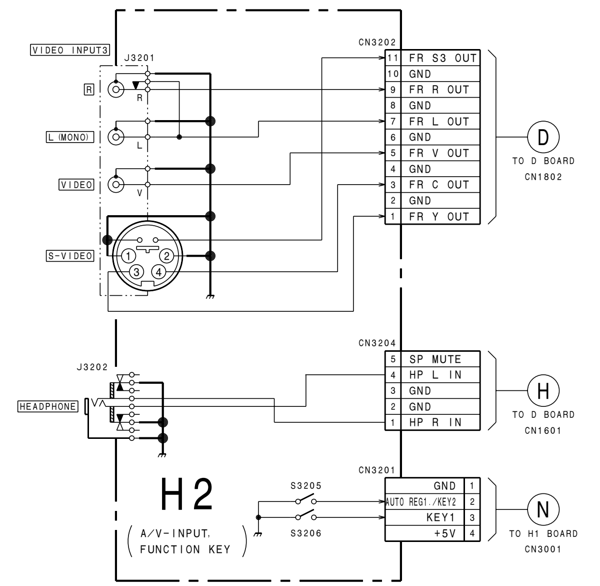
MEMO

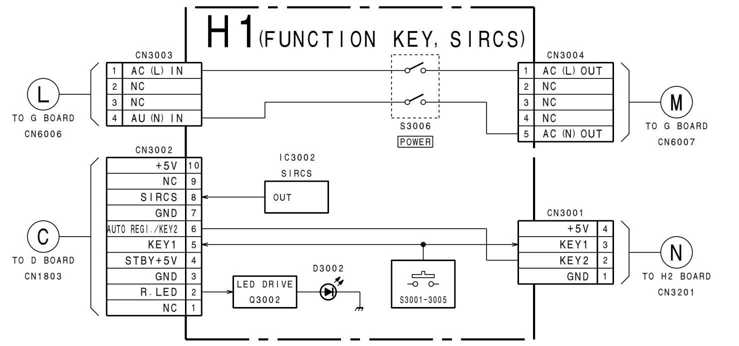
SECTION 6
DIAGRAM

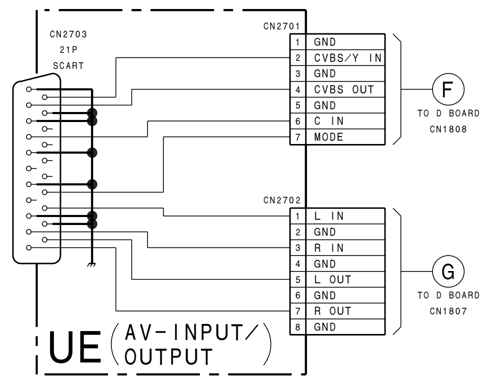
6-1. BLOCK DIAGRAM (1)






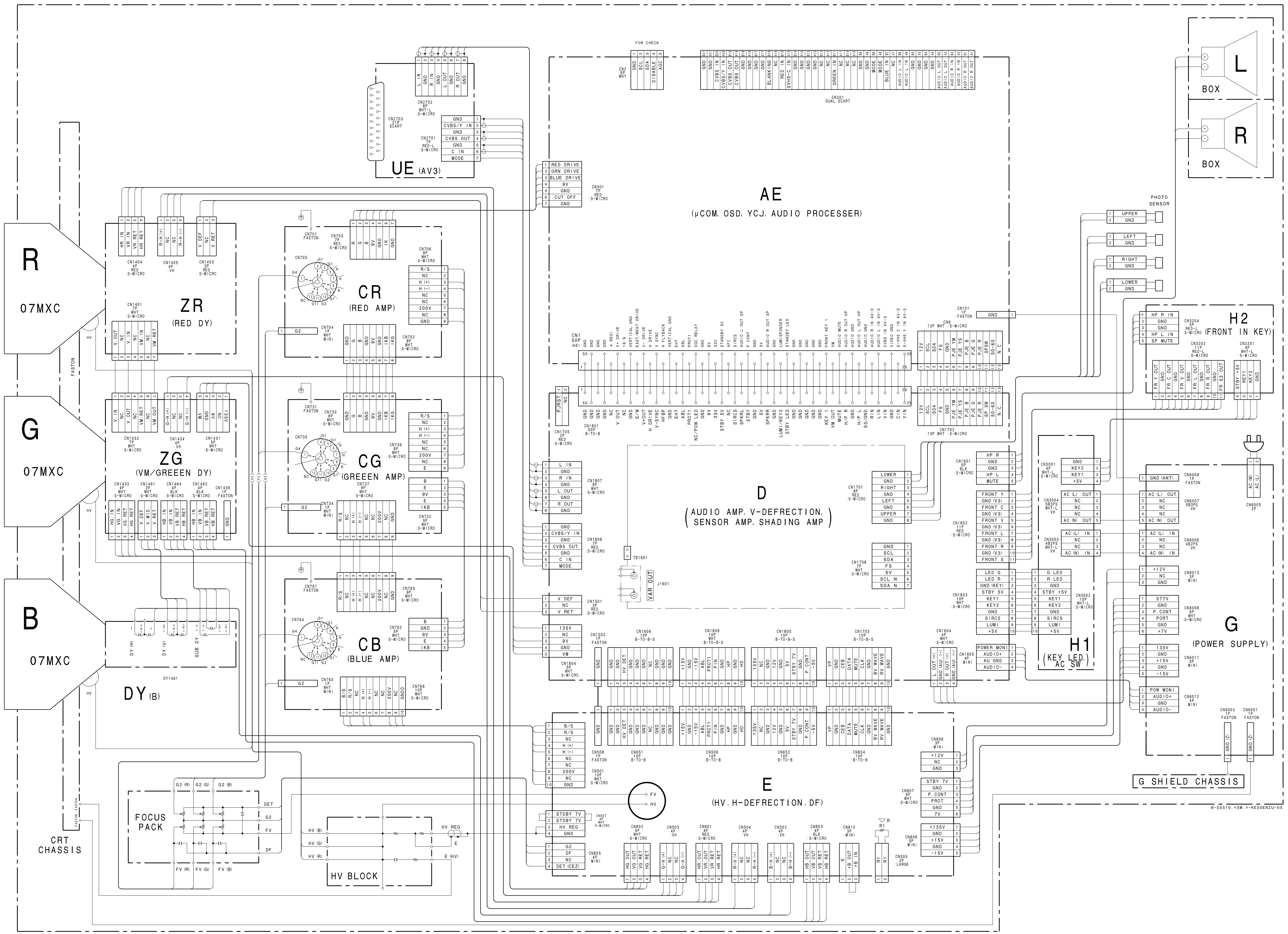




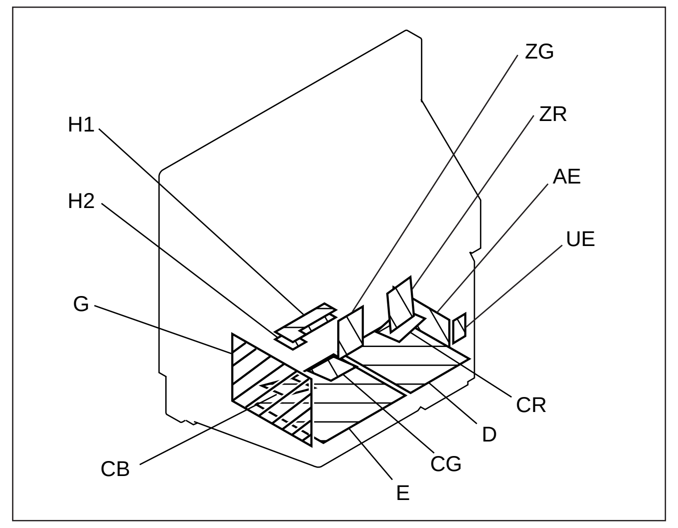
BLOCK DIAGRAM (2)



6-2. FRAME SCHEMATIC DIAGRAM



6-3. CIRCUIT BOARDS LOCATION



6-4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note:

- Capacitors without voltage indication are all 50V. All capacitors are in μF unless otherwise noted.
- All resistors are in ohms. kΩ=1000Ω, MΩ=1000kΩ
- Indication of resistance, which dose not have one for rating electrical power, is as follows.

  Pitch : 5mm
  Rating electrical power : 1/4 W (CHIP: 1/10 W)

- : nonflammable resistor.
- : fusible resistor.
- △ : internal component.
- : panel designation and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- As to the voltage volue shown by the semiconductors on the Shematic Diagram, see the another list
- Readings are taken with a color-bar signal input.
  no mark : PAL/common
  < > : SECAM
  ( ) : NTSC3.58
- Readings are taken with a 10MΩ digital multimeter.
- Voltages are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
  ∗ : Measurement impossibillity.
- V : B+line.
- V : B-line.
  (Actual measured value may be different).
- : signal path.
- Circled numbers are waveform references.

Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RW	NONFLAMMABLE WIREWOUND
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: ※	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

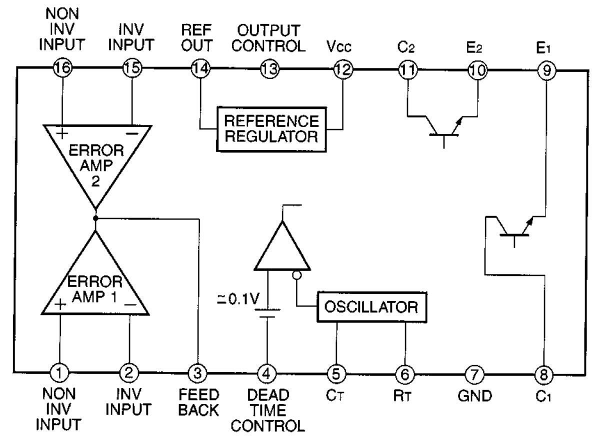
Terminal name of semiconductors in silk screen printed circuit (∗)

	Device	Printed symbol	Terminal name	Circuit
①	Transistor		Collector / Base / Emitter	
②	Transistor		Collector / Base / Emitter	
③	Diode		Cathode / Anode	
④	Diode		Cathode / Anode / (NC)	
⑤	Diode		Cathode / Anode / (NC)	
⑥	Diode		Common / Anode / Cathode	
⑦	Diode		Common / Anode / Cathode	
⑧	Diode		Common / Anode / Anode	
⑨	Diode		Common / Anode / Anode	
⑩	Diode		Common / Cathode / Cathode	
⑪	Diode		Common / Cathode / Cathode	
⑫	Diode		Anode / Anode / Cathode / Cathode / Anode / Anode	
⑬	Transistor (FET)		Drain / Source / Gate	
⑭	Transistor (FET)		Drain / Source / Gate	
⑮	Transistor (FET)		Source / Drain / Gate	
–	Discrete semiconductot			

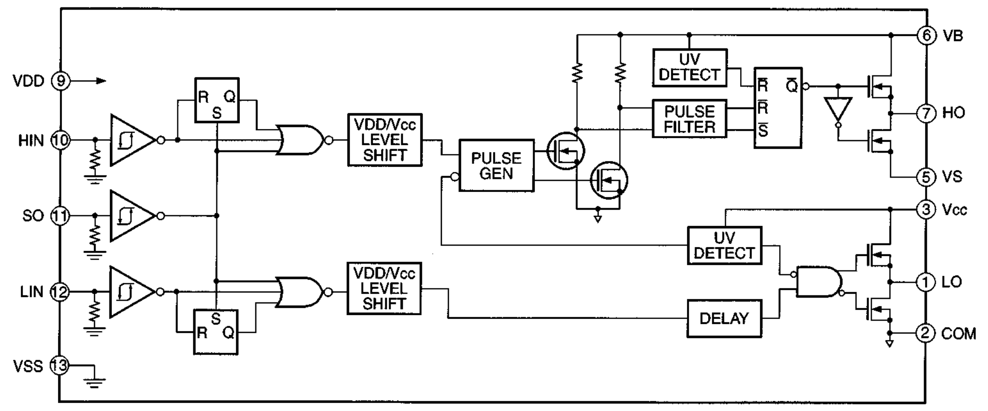
(Chip semiconductors that are not actually used are included.)

Ver.1.5

G BOARD : IC6004 IR3M02



G BOARD : IC6007 IR2112



G BOARD
IC VOLTAGE LIST

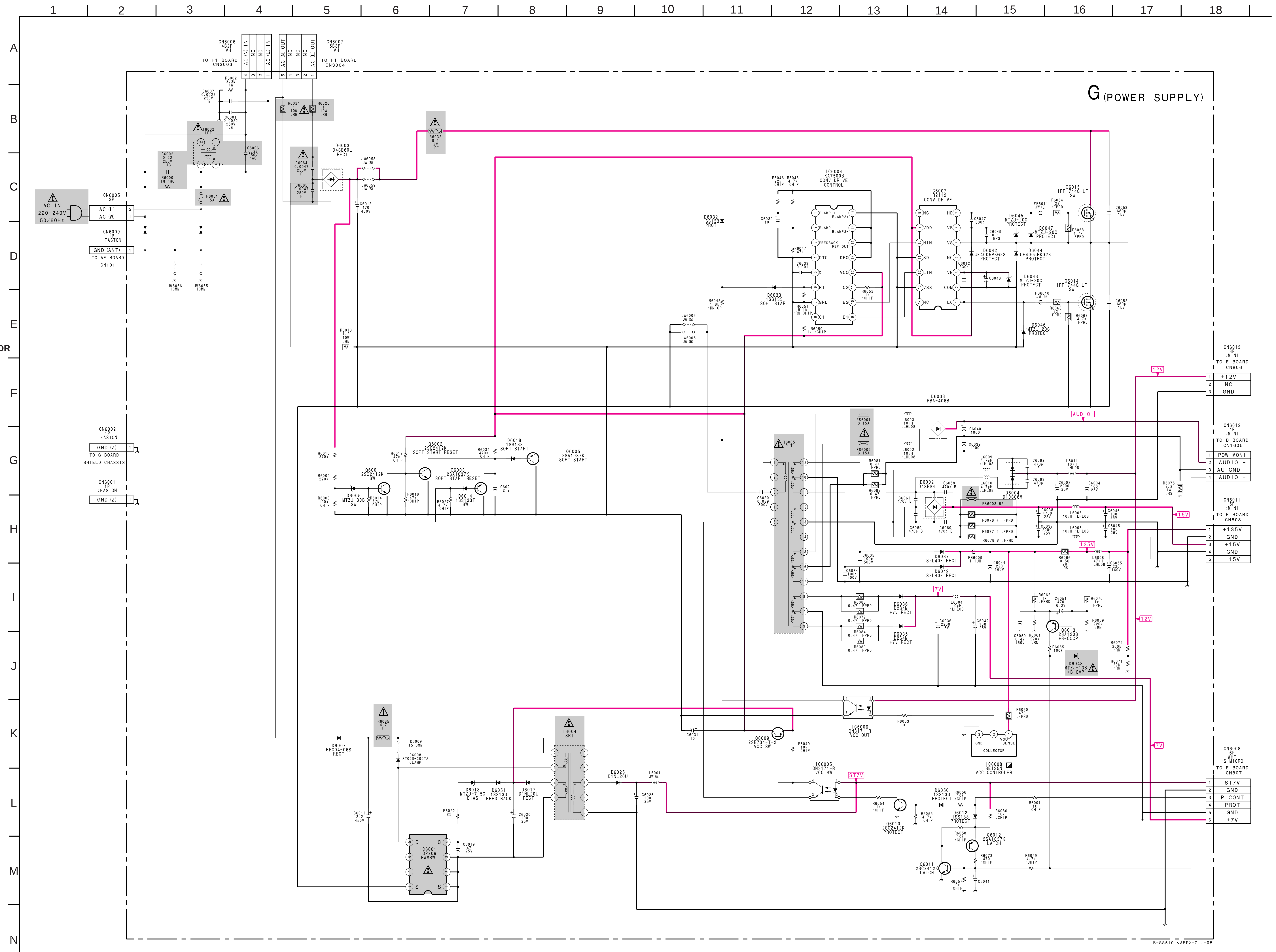
REF.	NO.	VOL.
●IC6001	1	GND
	2	GND
	3	GND
	4	5.9
	5	286.0
	8	GND
●IC6004	1	3.9
	2	4.8
	4	GND
	5	1.7
	6	3.9
	7	GND
	8	14.1
	9	5.8
	10	6.4
	11	14.4
	12	14.5
	13	5.3
	14	5.3
	15	5.3
	16	GND
IC6005	1	7.0
	2	5.8
	●3	13.5
	●4	13.8
IC6006	1	14.0
	2	13.0
	●3	GND
	●4	3.0
●IC6007	1	6.2
	2	GND
	3	14.5
	5	147.0
	6	159.0
	7	150.0
	9	14.5
	10	6.4
	11	GND
	12	5.8
	13	GND
IC6008	1	134.5
	2	12.5
	3	GND

•All voltage are in V.
•Pin numbers which are not described are not used.
● : The figurs in the parentheses are the voltage difference from primary side ground.

G BOARD TRANSISTOR VOLTAGE LIST

REF.		VOL.
●Q6001	B	0.8
	E	GND
	C	0
●Q6002	B	0
	E	GND
	C	13.8
●Q6003	B	
	E	13.8
	C	GND
●Q6005	B	5.1
	E	3.0
	C	GND
●Q6009	B	13.8
	E	14.5
	C	14.5
Q6010	B	0.7
	E	GND
	C	0.1
Q6011	B	0
	E	GND
	C	7.0
Q6012	B	7.0
	E	7.0
	C	0
Q6013	B	134.8
	E	135.1
	C	0
●Q6014	G	6.1
	D	147.0
	S	GND
●Q6015	G	150.0
	D	292.0
	S	147.0

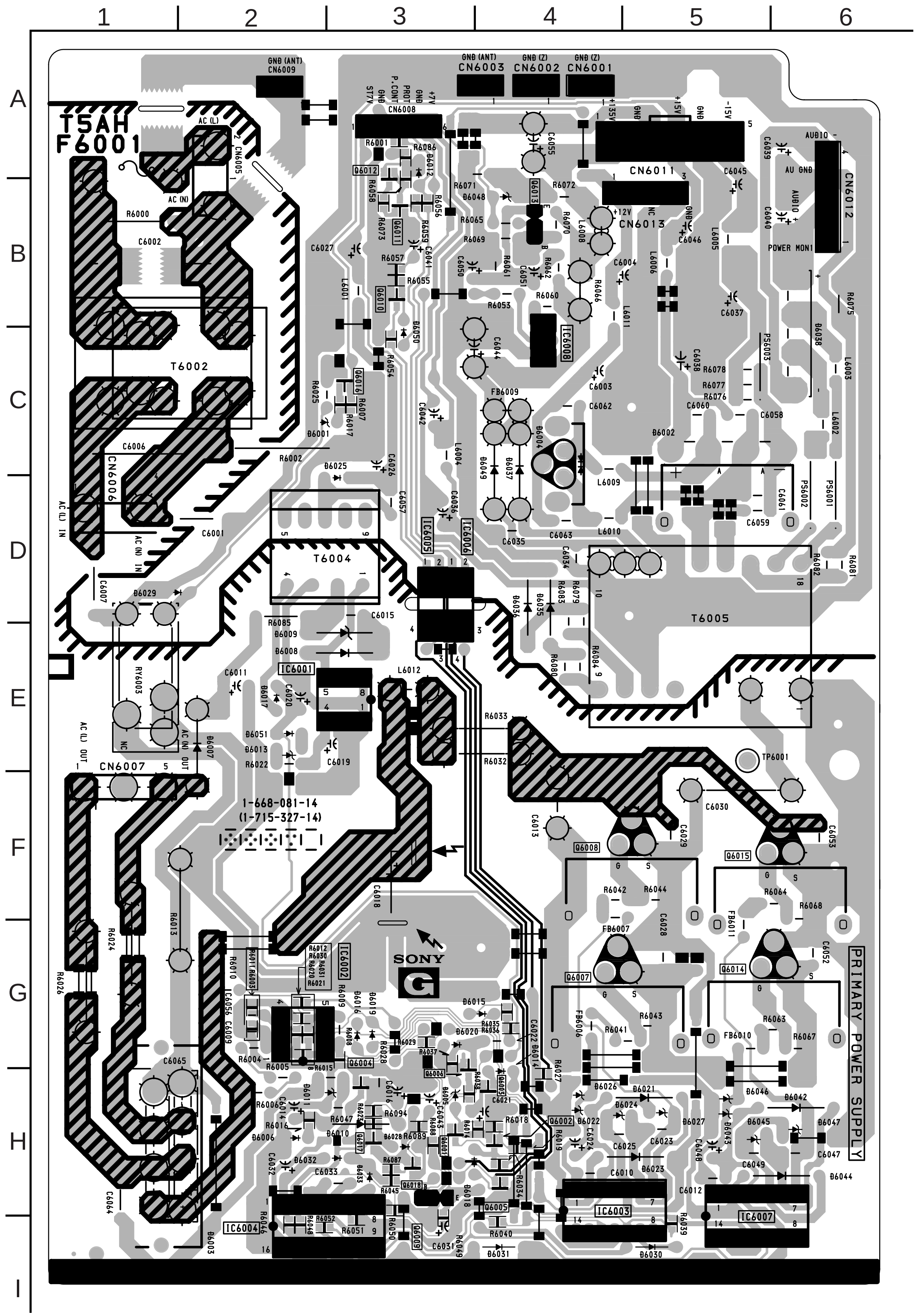
All voltages are in V.
● : The figurs in the parentheses are the voltage difference from primary side ground.



Schematic diagram
G board ➡

G [POWER SUPPLY]

– G Board –



G BOARD

DIODE		*
D6002	C-5	–
D6003	H-2	–
D6004	C-4	–
D6005	H-3	–
D6007	E-2	–
D6008	E-3	–
D6012	A-3	–
D6013	E-2	–
D6014	H-4	–
D6017	E-2	–
D6018	H-4	–
D6025	C-3	–
D6032	H-3	–
D6033	H-3	–
D6035	D-4	–
D6036	D-4	–
D6037	C-4	–
D6038	C-6	–
D6042	H-6	–
D6043	H-5	–
D6044	H-6	–
D6045	H-5	–
D6046	H-5	–
D6047	H-6	–
D6048	B-4	–
D6049	C-4	–
D6050	C-3	–
D6051	E-2	–

TRANSISTOR		*
Q6001	H-3	①
Q6002	H-4	①
Q6003	H-4	①
Q6005	H-4	①
Q6009	H-3	–
Q6010	B-3	①
Q6011	B-3	①
Q6012	A-3	①
Q6013	B-4	–
Q6014	G-6	–
Q6015	F-6	–

IC	
IC6001	E-3
IC6004	I-2
IC6005	D-3
IC6006	D-3
IC6007	H-5
IC6008	C-4

✱: **Refer to Terminal name of semiconductors in silk screen printed circuit (see page 46)**

AE(1/2) [VIDEO SW, AUDIO SW, AUDIO PROCESSER, TUNER, DIGITAL COMB FILTER] AE(2/2) [CHROMA DECODER, TEXT/OSD]

– AE Board –

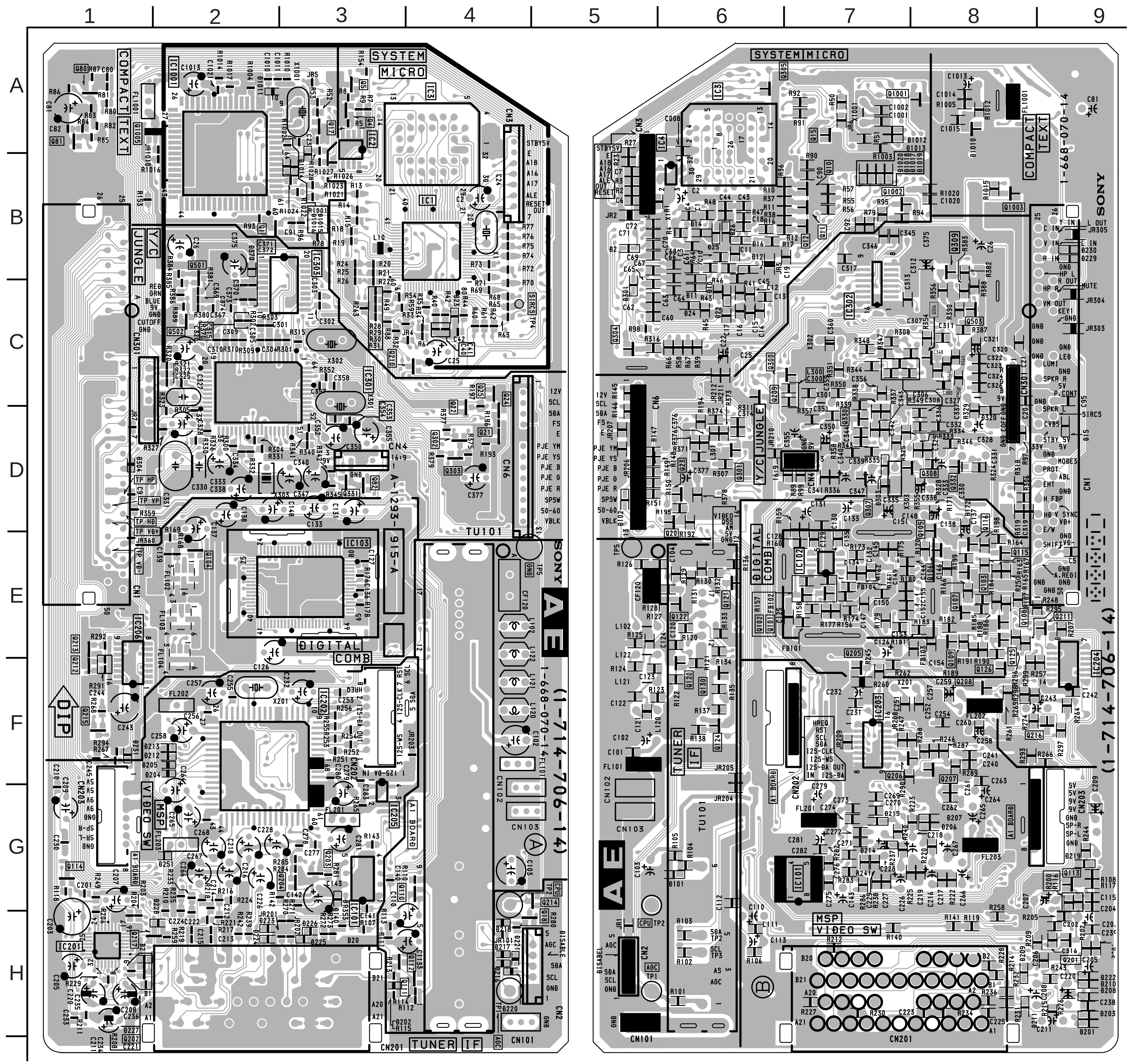
AE BOARD

DIODE		*
D2	B-5	③
D10	B-6	③
D11	C-6	③
D12	B-6	③
D16	B-6	③
D101	G-6	③
D102	D-5	③
D201	H-9	③
D202	H-3	③
D203	H-9	③
D204	F-2	③
D205	F-2	③
D206	G-8	③
D207	G-8	③
D208	H-9	③
D209	H-8	③
D210	H-9	③
D211	H-8	③
D212	F-2	③
D213	F-2	③
D214	G-7	③
D215	G-7	③
D216	H-4	③
D217	H-4	③
D218	H-4	③
D220	H-4	③
D221	H-4	③
D222	H-9	③
D223	H-2	③
D224	H-2	③
D225	H-3	③
D226	H-3	③
D227	H-1	③
D228	H-2	③
D231	F-1	③
D251	G-2	③
D303	D-7	③
D304	D-1	③
D320	D-8	③
D370	B-2	③
D1010	A-8	④

TRANSISTOR		*
Q1	B-2	②
Q4	A-3	②
Q15	A-7	①
Q17	A-3	②
Q18	H-4	②
Q20	D-6	①
Q21	D-4	②
Q22	D-4	②
Q23	D-6	①
Q24	D-4	②
Q25	C-4	②
Q101	E-7	①
Q102	E-7	①
Q103	E-8	①
Q104	E-2	②
Q105	D-8	①
Q106	E-8	①
Q107	E-8	①
Q108	E-8	①
Q109	E-8	①
Q110	G-4	②
Q111	H-3	②
Q112	H-4	②
Q113	G-9	①
Q114	G-1	②
Q115	E-8	①
Q116	E-8	①
Q120	F-6	①
Q121	E-6	①
Q122	E-6	①
Q124	F-6	①
Q125	E-8	①
Q130	F-6	①
Q201	H-9	①
Q202	H-1	②
Q203	G-3	②
Q204	G-3	②
Q211	E-9	①
Q212	F-1	②
Q213	E-1	②
Q214	G-4	②
Q215	F-1	②
Q216	F-9	①
Q217	H-1	②
Q300	C-7	①
Q301	D-6	①
Q302	D-4	②
Q303	D-4	②
Q304	C-5	①
Q305	A-6	①
Q306	C-8	①
Q307	D-7	①
Q308	D-8	①
Q309	B-8	①
Q330	D-7	①
Q331	D-3	②
Q1001	A-8	①
Q1002	B-7	①

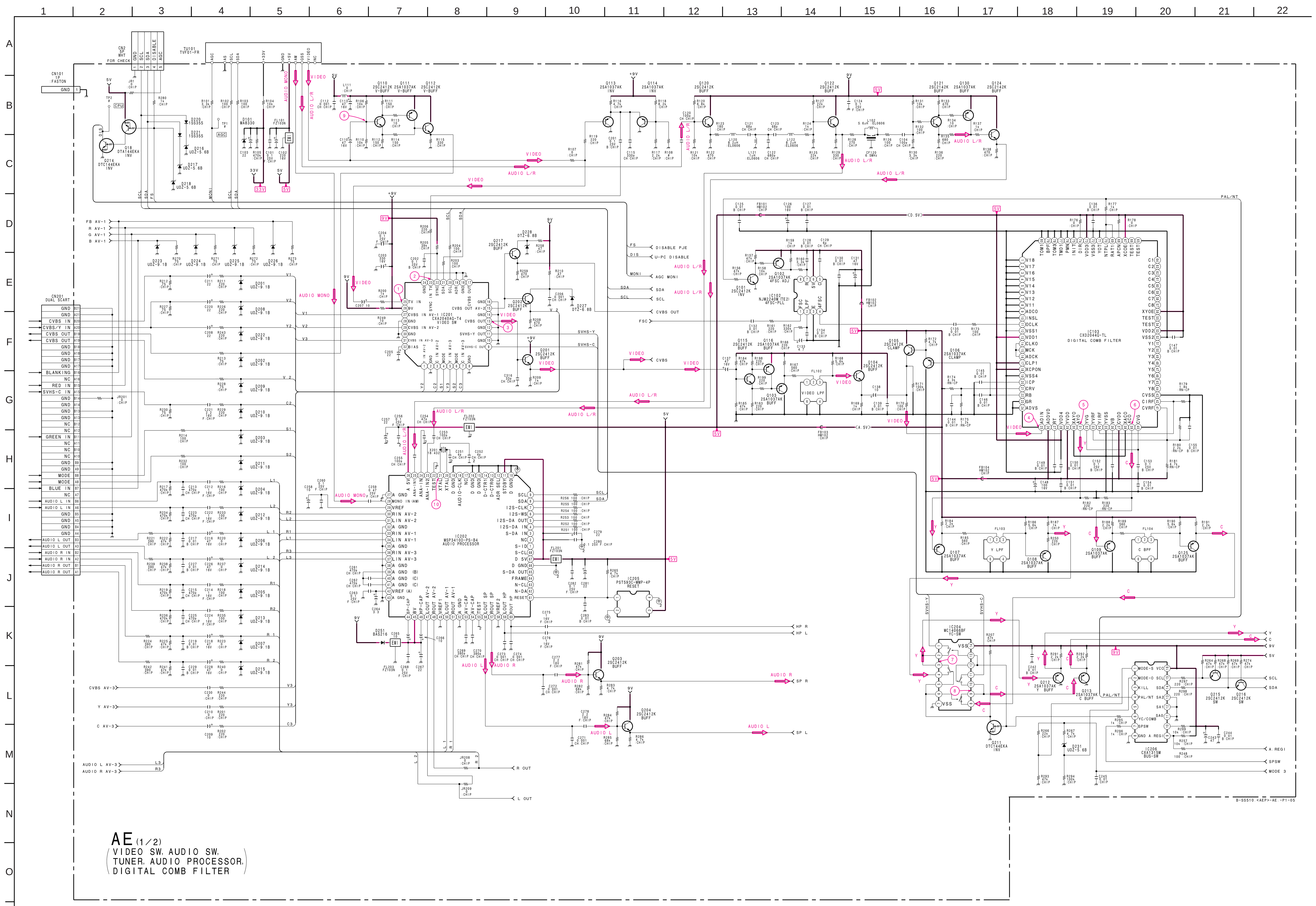
IC	
IC1	B-4
IC2	A-3
IC3	A-4,A-6
IC4	B-6
IC102	E-7
IC103	E-3
IC201	H-1
IC202	F-2
IC204	F-9
IC205	G-3
IC206	F-1
IC301	C-2
IC302	C-7
IC303	C-3
IC1001	A-2

*: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 46)

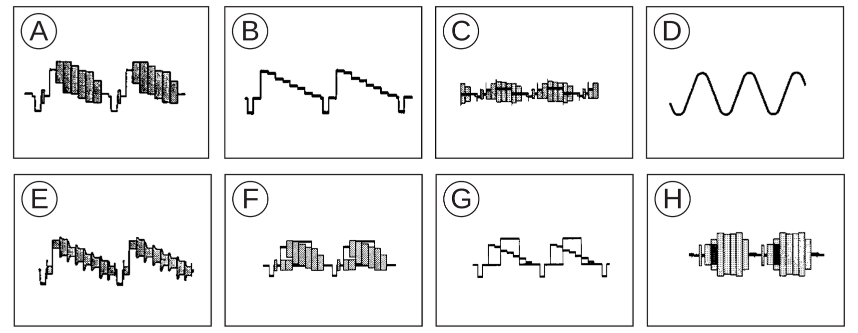


< Component Side >

< Conductor Side >



• AE(1/2) BOARD WAVEFORMS



• WAVEFORMS AE(1/2) BOARD

CIRCUIT WAVEFORM REFERENCE	PAL		SECAM		NTSC	
1	A	1.1Vp-p(H)	E	1.2Vp-p(H)	F	1.5Vp-p(H)
2	A	0.9Vp-p(H)	E	1.0Vp-p(H)	F	0.9Vp-p(H)
3	A	1.0Vp-p(H)	E	1.2Vp-p(H)	F	1.5Vp-p(H)
4	A	1.7Vp-p(H)	E	1.8Vp-p(H)	F	2.2Vp-p(H)
5	B	1.3Vp-p(H)	B	1.3Vp-p(H)	G	1.6Vp-p(H)
6	C	0.5Vp-p(H)	C	0.4Vp-p(H)	H	1.5Vp-p(H)
7	B	1.1Vp-p(H)	B	1.1Vp-p(H)	G	1.2Vp-p(H)
8	C	0.5Vp-p(H)	C	0.4Vp-p(H)	H	1.2Vp-p(H)
9	A	1.1Vp-p(H)	E	1.2Vp-p(H)	F	1.4Vp-p(H)
10	D	1.6Vp-p(18.4MHz)				

AE(1/2) BOARD IC VOLTAGE LIST

REF.	NO.	VOL.	REF.	NO.	VOL.	REF.	NO.	VOL.
IC102	1	2.4		2	GND		45	8.2
	2	1.9(2.1)		3	4.3		46	7.1
	3	GND		4	0.2		47	4.6<3.9>(3.9)
	4	2.9		5	4.2		48	4.5<3.9>(3.9)
	5	3.0		6	0.2		49	GND
	6	4.7		7	4.3		50	4.6<3.9>(3.9)
	7	3.4		8	GND		51	4.5<3.9>(3.9)
IC103	1	GND		9	4.3		52	GND
	2	GND		10	GND		53	4.7<3.9>(3.9)
	3	GND		11	4.3		54	4.7<3.9>(3.9)
	4	GND		12	GND		55	GND
	5	GND		13	4.3		56	0
	6	GND		14	GND		57	0
	7	GND		15	4.3		58	GND
	8	GND		16	GND		59	0.2
	9	GND		18	GND		60	0.2
	10	GND		19	GND		61	4.7
	11	2.3		20	4.2		66	GND
	12	GND		21	4.5		67	4.8
	13	4.5		22	4.6	IC203	1	4.3
	14	2.0		23	3.2		2	GND
	15	2.0		24	GND		3	4.4<3.8>(3.8)
	16	2.0		25	4.3		4	GND
	17	4.5		26	8.5		5	4.5<4.5>(3.8)
	18	4.56		27	4.3		6	GND
	19	GND		28	GND		7	GND
	20	0		29	4.3		8	GND
	21	1.1		30	GND		9	GND
	22	0.6		31	4.3		10	8.9
	23	GND		32	4.3		11	GND
	24	GND	IC202	4	2.5		12	4.3
	25	1.2		5	2.6<4.4>(2.4)		13	4.4<3.9>(3.8)
	26	4.5		6	2.4		14	4.4<3.8>(3.8)
	27	2.3		7	2.4		15	GND
	28	4.5		8	4.5		16	8.9
	29	4.5		9	4.7(4.4)	IC204	1	4.3
	30	GND		10	GND		2	2.6(2.8)
	31	0.6(0.8)		11	4.8		3	2.6(2.8)
	32	2.6		12	GND		4	2.6(2.8)
	33	1.5		13	4.7		5	8.9
	34	1.5		15	GND		6	8.9
	35	GND		16	GND		7	GND
	36	0.9		19	GND		8	2.3
	37	4.5		20	2.3		9	2.3
	38	GND		21	2.3		10	2.3
	39	0.8		22	GND		11	4.3
	40	2.6		23	0.5<0.9>		12	0.4
	41	1.5		24	1.6		13	0.4
	42	1.5		25	1.6		14	9.0
	43	GND		26	4.8	IC205	1	4.7
	52	GND		27	GND		2	GND
	53	4.5		28	3.9		3	4.7
	56	4.5		29	2.7		4	GND
	67	5.0<4.5>(4.6)		30	3.9	IC206	1	0
	68	4.5		31	3.9		2	0<0.2>(0.2)
	69	0.5		32	GND		4	5.0
	70	0.5		33	3.9		6	0.5
	71	GND		34	3.9		7	0.5
	72	GND		35	GND		8	GND
	73	5.0		36	3.8		9	8.8
	74	5.0(4.5)		37	3.9		10	8.8
	75	GND		38	GND		11	GND
	76	GND		39	3.9		12	GND
	77	GND		40	3.9		13	GND
	78	GND		41	3.9		14	4.4<4.1>
	79	GND		42	3.8		15	4.7<4.2>
	80	GND		43	GND		16	8.9
IC201	1	4.2		44	7.2			

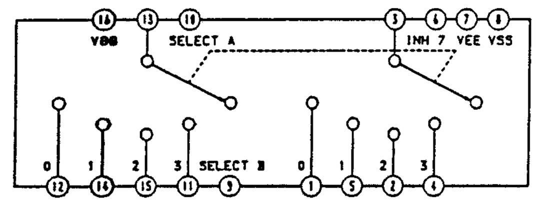
•All voltage are in V.
•Pin numbers which are not described are not used.

AE(1/2) BOARD TRANSISTOR VOLTAGE LIST

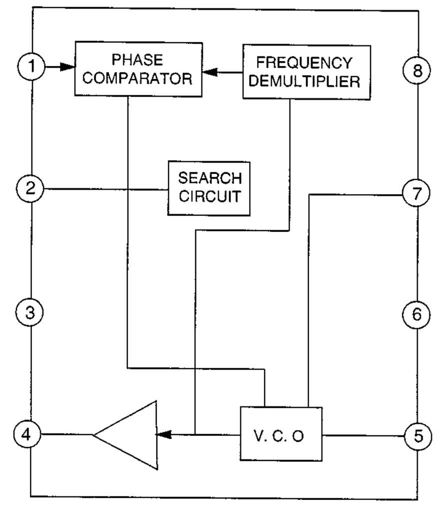
REF.		VOL.	REF.		VOL.
Q18	B	4.8	Q124	B	5.4
	E	4.9		E	4.7
	C	0		C	9.0
Q101	B	0.6	Q125	B	1.7
	E	GND		E	2.3
	C	4.6		C	GND
Q102	B	4.5	Q130	B	8.3
	E	4.7		E	9.0
	C	4.6		C	5.4
Q103	B	2.2	Q201	B	4.2
	E	2.8		E	3.6
	C	GND		C	8.6
Q104	B	2.9	Q202	B	4.3
	E	2.3		E	3.7
	C	4.5		C	7.3
Q105	B	1.1	Q203	B	4.5
	E	1.2		E	3.8
	C	4.6		C	8.9
Q106	B	0.5	Q204	B	4.4
	E	1.1		E	3.8
	C	GND		C	8.9
Q107	B	0.6(0.8)	Q205	B	0
	E	1.2(1.4)		E	GND
	C	GND		C	8.9
Q108	B	1.5	Q206	B	3.7
	E	2.2		E	4.3
	C	GND		C	GND
Q109	B	0.7	Q207	B	3.7
	E	1.4		E	4.3
	C	GND		C	GND
Q110	B	2.3	Q208	B	8.2
	E	1.7		E	9.0
	C	4.1		C	9.0
Q111	B	4.1	Q209	B	0.7
	E	4.7		E	GND
	C	2.6		C	0
Q112	B	2.6	Q210	B	0
	E	1.9		E	GND
	C	4.7		C	0.7
Q113	B	1.7	Q211	B	0.4
	E	2.3		E	GND
	C	GND		C	8.9
Q114	B	1.8	Q212	B	2.6
	E	2.3		E	3.3
	C	GND		C	GND
Q115	B	2.0	Q213	B	2.3
	E	1.4		E	2.9
	C	4.0		C	GND
Q116	B	4.0	Q214	B	0
	E	4.6		E	GND
	C	2.1		C	2.6
Q120	B	5.2	Q215	B	4.9<4.7>
	E	4.5		E	4.7<4.2>
	C	9.0		C	4.2<4.4>
Q121	B	2.2	Q216	B	4.9<4.7>
	E	1.6		E	4.4<4.1>
	C	8.3		C	4.2<4.6>
Q122	B	4.1	Q217	B	4.2OK
	E	3.5		E	3.7
	C	9.0		C	7.2

All voltages are in V.

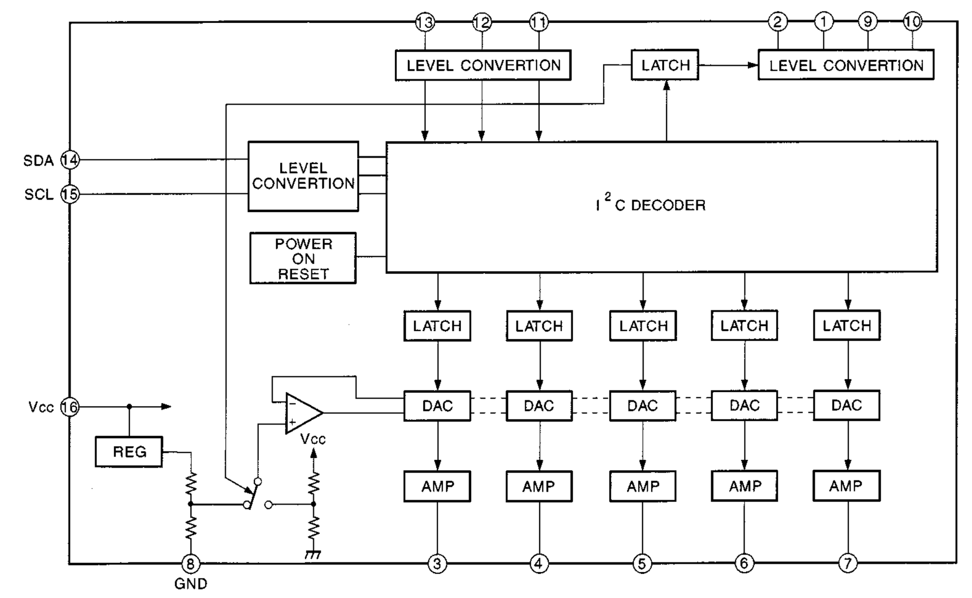
AE(1/2) BOARD : IC203 MC14052BR2



AE(1/2) BOARD : IC102 NJM2240M(TE2)



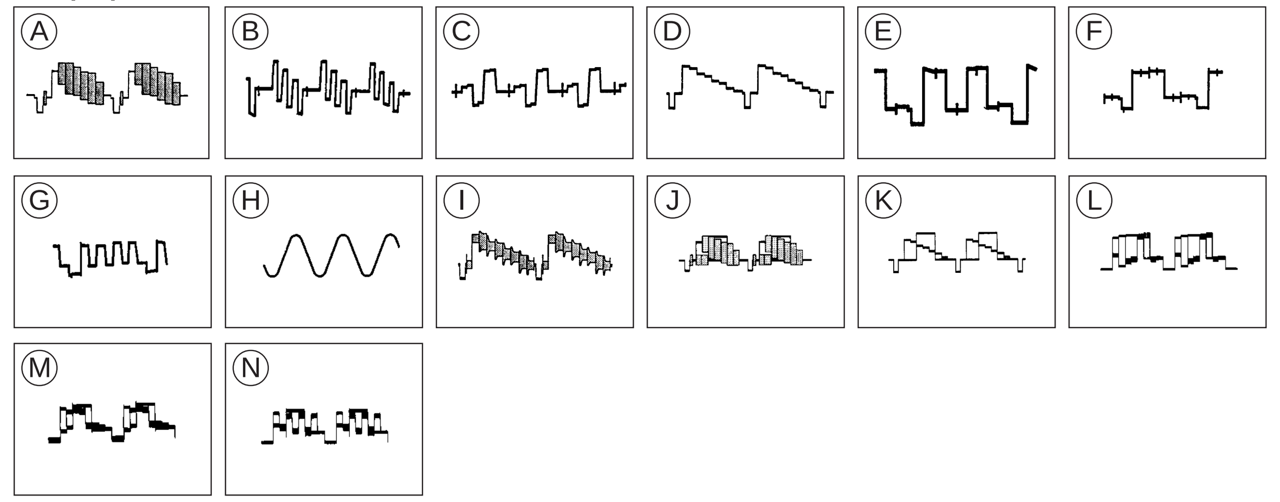
AE(1/2) BOARD : IC206 CXA1315M



Schematic diagram
← AE(1/2) board

Schematic diagram
AE(2/2) board →

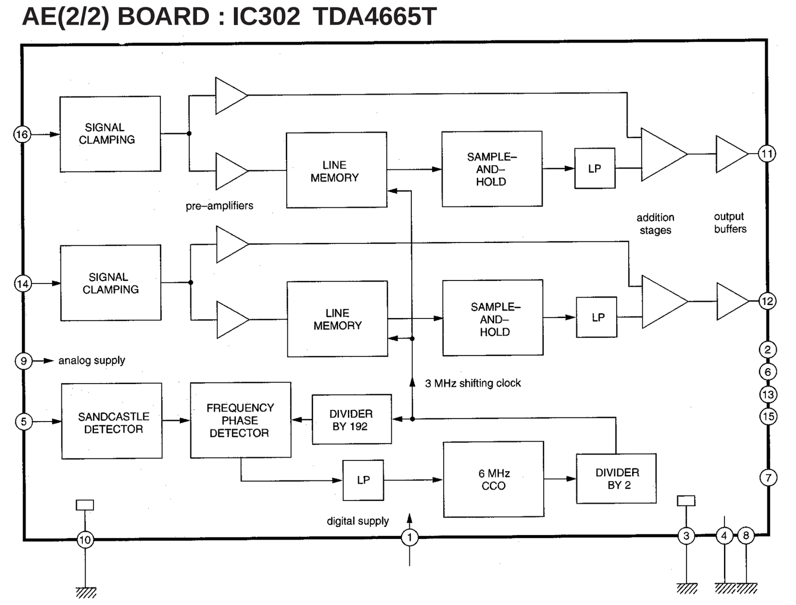
• AE(2/2) BOARD WAVEFORMS



• WAVEFORMS AE(2/2) BOARD

CIRCUIT WAVEFORM REFERENCE	PAL		SECAM		NTSC	
1	A	1.0Vp-p(H)	I	1.2Vp-p(H)	J	1.6Vp-p(H)
2	C	0.6Vp-p(H)	C	1.0Vp-p(H)	C	0.4Vp-p(H)
3	B	0.6Vp-p(H)	B	1.5Vp-p(H)	B	0.4Vp-p(H)
4	B	1.3Vp-p(H)	B	1.1Vp-p(H)	B	1.0Vp-p(H)
5	C	1.1Vp-p(H)	C	1.5Vp-p(H)	C	0.6Vp-p(H)
6	A	1.0Vp-p(H)	I	1.2Vp-p(H)	J	1.6Vp-p(H)
7	D	1.8Vp-p(H)	D	2.2Vp-p(H)	K	2.2Vp-p(H)
8	E	3.6Vp-p(H)	E	3.9Vp-p(H)	L	3.9Vp-p(H)
9	F	3.6Vp-p(H)	F	3.8Vp-p(H)	M	3.9Vp-p(H)
10	G	3.4Vp-p(H)	G	3.7Vp-p(H)	N	3.9Vp-p(H)
11	H	3.4Vp-p(11.5MHz)				
12	H	1.7Vp-p(20.48MHz)				

AE(2/2) BOARD : IC302 TDA4665T



AE(2/2) BOARD IC VOLTAGE LIST

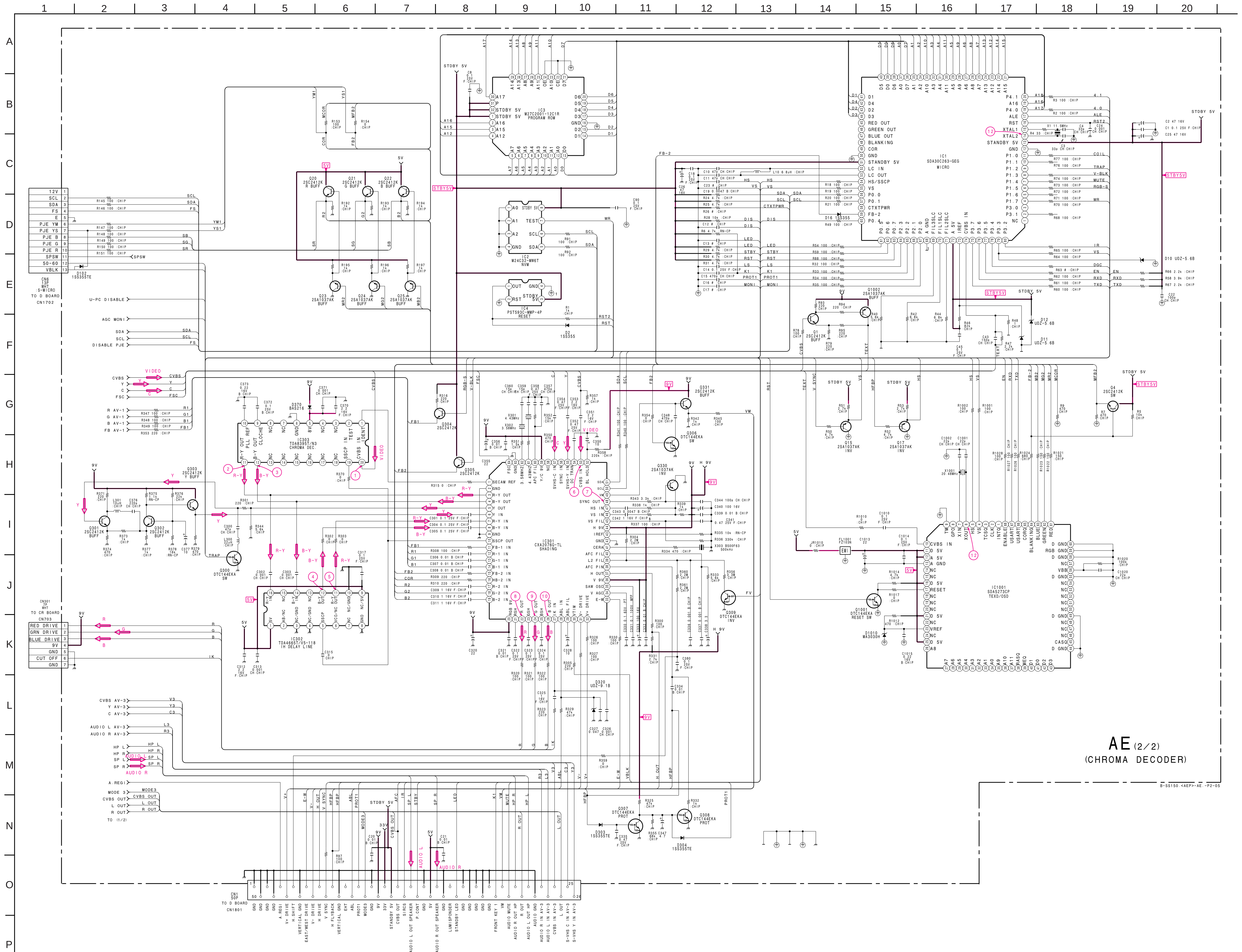
REF.	NO.	VOL.	REF.	NO.	VOL.	REF.	NO.	VOL.
IC1	2	0		4	GND		36	8.9
	3	5.0		5	4.4<4.6>		37	3.2
	4	5.0		6	4.2<4.4>		38	3.4
	5	5.0		7	4.9		39	4.7
	6	0		8	5.0		40	4.2
	7	0.8	IC3	1	5.0		41	2.4
	8	0.1		2	*		42	GND
	9	0.1		3	*		43	1.8
	10	0		4	*		44	8.9
	11	1.8		5	1.9		45	2.5
	12	GND		6	*		46	4.0
	13	5.0		7	2.8		47	3.2
	14	2.4		8	2.5		48	4.4
	15	2.3		9	2.2		49	6.4
	16	4.6(5.0)		10	2.5		50	4.5
	17	1.7		11	2.5		51	3.9(4.5)
	18	0		12	2.5		52	4.2(3.9)
	19	3.0		13	2.1		53	4.0(4.2)
	20	0		14	2.0		54	5.0
	21	2.5(2.9)		15	2.1		55	4.0
	22	1.0		16	GND		57	4.2
	23	3.5(3.2)		17	1.9<1.7>(1.9)		59	8.9
	24	3.2		18	2.8		60	5.5<4.7>(5.6)
	25	2.2(1.8)		19	2.9		61	2.4(7.4)
	26	2.4		20	2.7		62	7.4(5.9)
	27	2.6		21	3.0		63	GND
	28	3.5		22	GND		64	5.3
	29	2.7		23	*	IC302	1	4.9
	30	2.7		24	GND		3	GND
	31	2.6		25	*		4	GND
	32	2.3		26	*		5	0.6
	33	2.7		27	*		8	GND
	34	2.6		28	*		9	4.9
	35	2.6		29	0.9		10	GND
	36	3.0		30	0		11	3.1
	37	2.5		31	5.0		12	3.0
	38	2.8		32	5.0		14	1.4
	39	2.2	IC4	1	5.0		16	1.4
	40	2.8		2	GND	IC303	1	1.6<4.9>(1.2)
	41	0.9(2.1)		3	5.0		5	8.1
	42	5.0(3.0)		4	GND		6	GND
	43	2.5(2.1)	IC301	1	1.6<4.9>(1.6)		9	3.5(3.2)
	44	4.2(1.7)		2	GND		10	4.3
	50	GND		3	5.7<3.0>(5.7)		11	5.7<3.0>(5.7)
	51	5.0		4	5.7<3.0>(5.7)		12	5.7<3.0>(5.7)
	52	0		5	3.7		19	0.7
	53	0		6	5.0		20	3.6
	54	1.3		7	5.5	IC1001	4	0.9
	55	0.8		8	5.5		5	1.3
	56	0(4.5)		9	GND		6	1.6
	57	0(4.4)		10	0.7		7	1.8
	59	0.6(1.3)		11	0.1		9	GND
	60	5.0(2.3)		12	5.5		10	0.9(1.1)
	61	0		13	5.5		11	4.8
	62	3.9		14	5.5		12	4.8
	63	4.6		15	0		13	GND
	64	0.8(0.1)		16	0		16	4.7
	65	5.0		17	5.5		17	0.1
	66	0		18	5.5		21	4.8
	67	3.9(2.3)		19	5.5		23	2.9
	68	GND		20	8.9		25	4.7
	69	0		21	4.4		44	GND
	70	0		22	1.8<2.0>(1.8)		49	GND
	71	0		23	4.4		55	GND
	72	5.0		24	1.7<1.9>(1.7)		56	0
	73	4.9		25	4.5		58	GND
	74	0(4.7)		26	1.6<1.9>(1.8)		59	GND
	75	5.0(4.6)		27	4.9(4.4)		60	GND
	76	5.0(4.7)		28	4.4<28>(3.5)		61	0
	77	5.0(3.0)		29	8.8		62	0
	78	0		30	0.6		63	0
	79	0.8		31	3.0		64	0
	80	5.0		32	3.0		66	4.3<4.8>(4.7)
IC2	1	GND		33	4.1		67	4.9(4.7)
	2	GND		34	4.0		68	3.5<3.0>(3.0)
	3	GND		35	4.6			

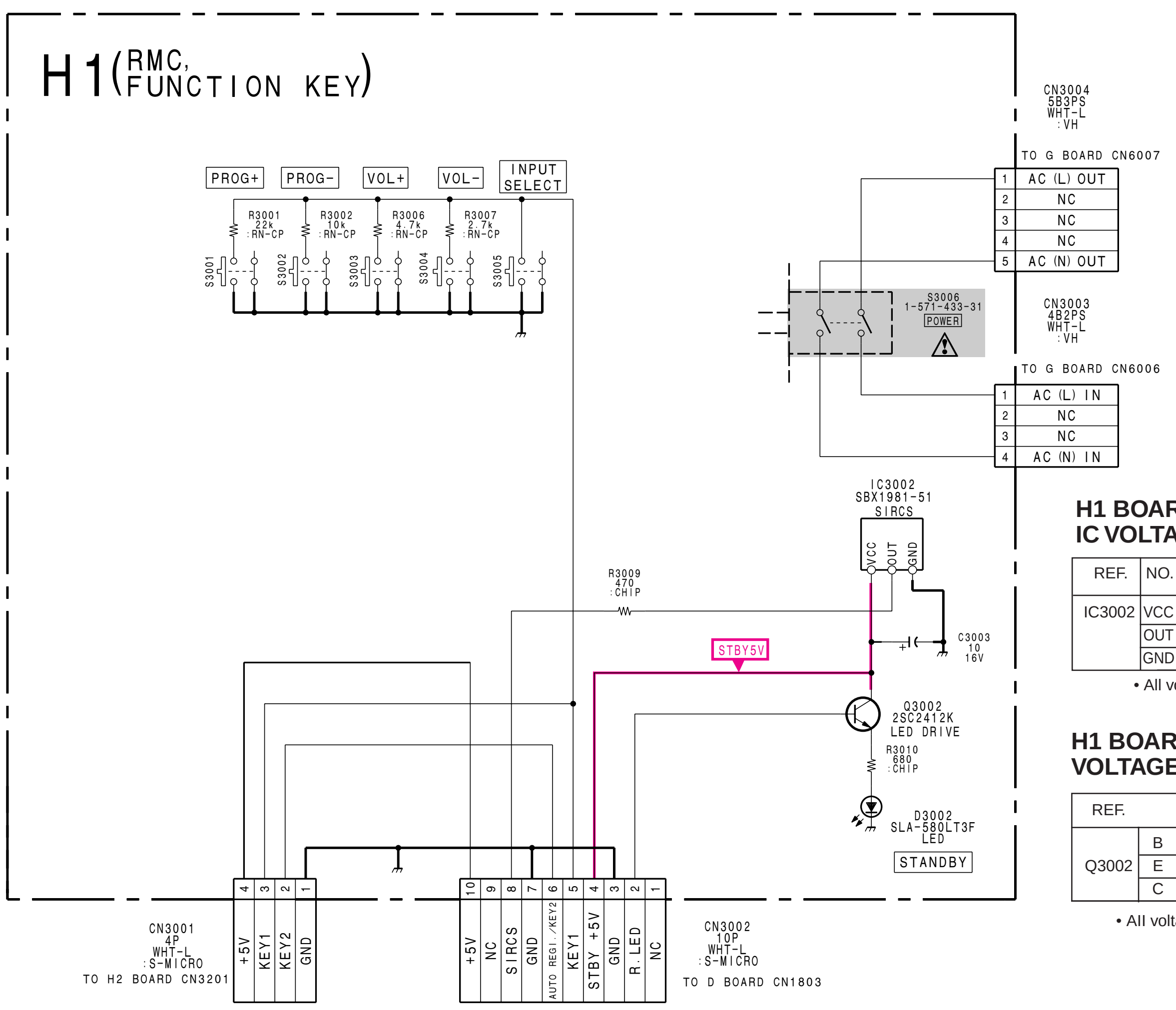
•All voltage are in V.
* :Can not mesured.
•Pin numbers which are not described are not used.

AE(2/2) BOARD TRANSISTOR VOLTAGE LIST

REF.		VOL.	REF.		VOL.
Q1	B	3.6	Q302	B	3.6
	E	3.0		E	3.0
	C	8.2		C	5.7
Q4	B	0.4	Q303	B	5.7
	E	0		E	5.1
	C	5.0		C	8.9
Q15	B	0.2	Q304	B	0
	E	0.8		E	0
	C	GND		C	5.0
Q17	B	0.7	Q305	B	0
	E	1.4		E	0
	C	GND		C	5.0
Q20	B	0.7	Q306	B	0
	E	0.2		E	GND
	C	4.9		C	0.2
Q21	B	0.7	Q307	B	4.2
	E	0.2		E	GND
	C	4.7		C	0
Q22	B	0.7	Q308	B	0
	E	0.2		E	GND
	C	4.8		C	3.4
Q23	B	0	Q309	B	0(4.9)
	E	0.7		E	GND
	C	GND		C	3.6(0)
Q24	B	0	Q330	B	4.4(4.7)
	E	0.7		E	5.1(5.3)
	C	GND		C	GND
Q25	B	0	Q331	B	6.4
	E	0.7		E	5.7
	C	GND		C	8.9
Q300	B	0	Q1001	B	4.6
	E	GND		E	GND
	C	0		C	0.1
Q301	B	3.7	Q1002	B	8.3
	E	3.0		E	9.0
	C	7.5		C	5.3

All voltages are in V.





H1 BOARD
IC VOLTAGE LIST

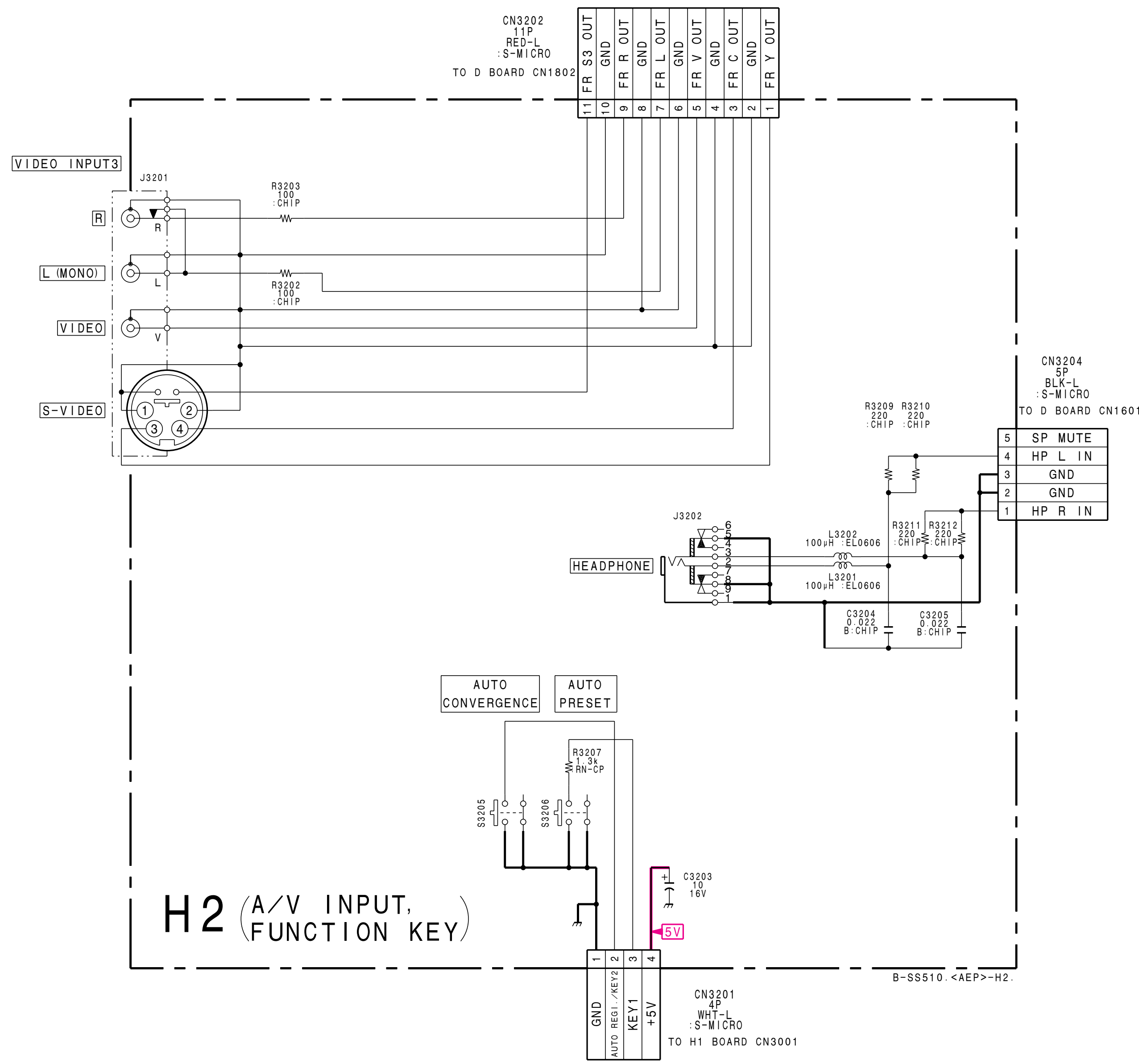
REF.	NO.	VOL.
IC3002	VCC	5.0
	OUT	5.0
	GND	GND

• All voltage are in V.

H1 BOARD TRANSISTOR VOLTAGE LIST

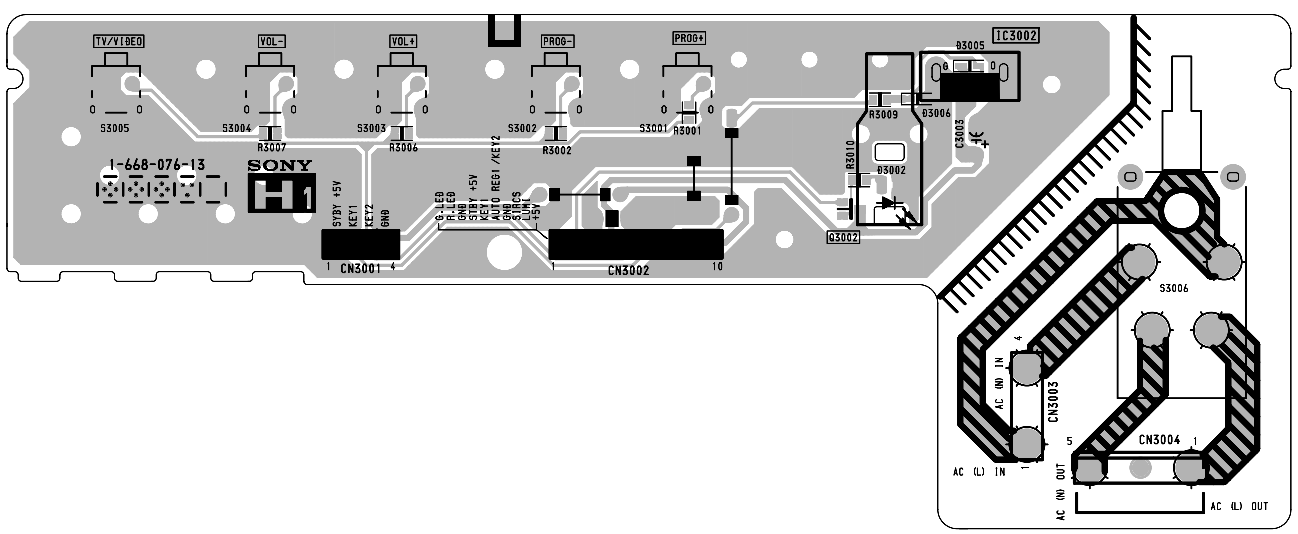
REF.		VOL.
Q3002	B	0.5
	E	0.1
	C	5.0

• All voltages are in V.



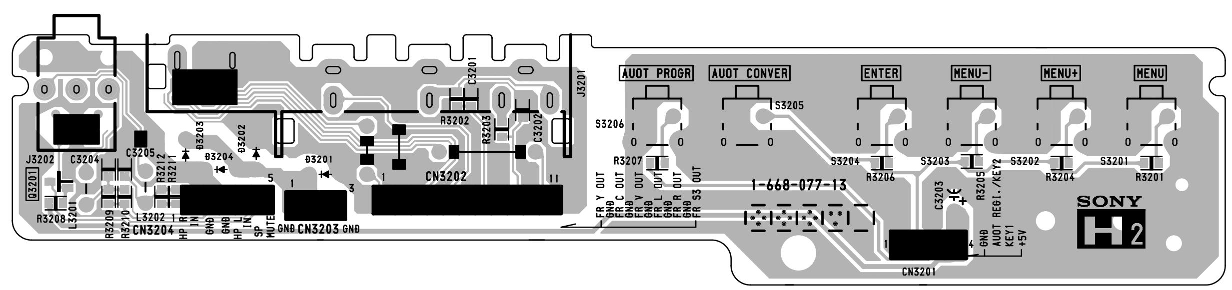
H1 [FUNCTION KEY, RMC]

– H1 Board –



H2 [A/V INPUT, FUNCTION KEY]

– H2 Board –

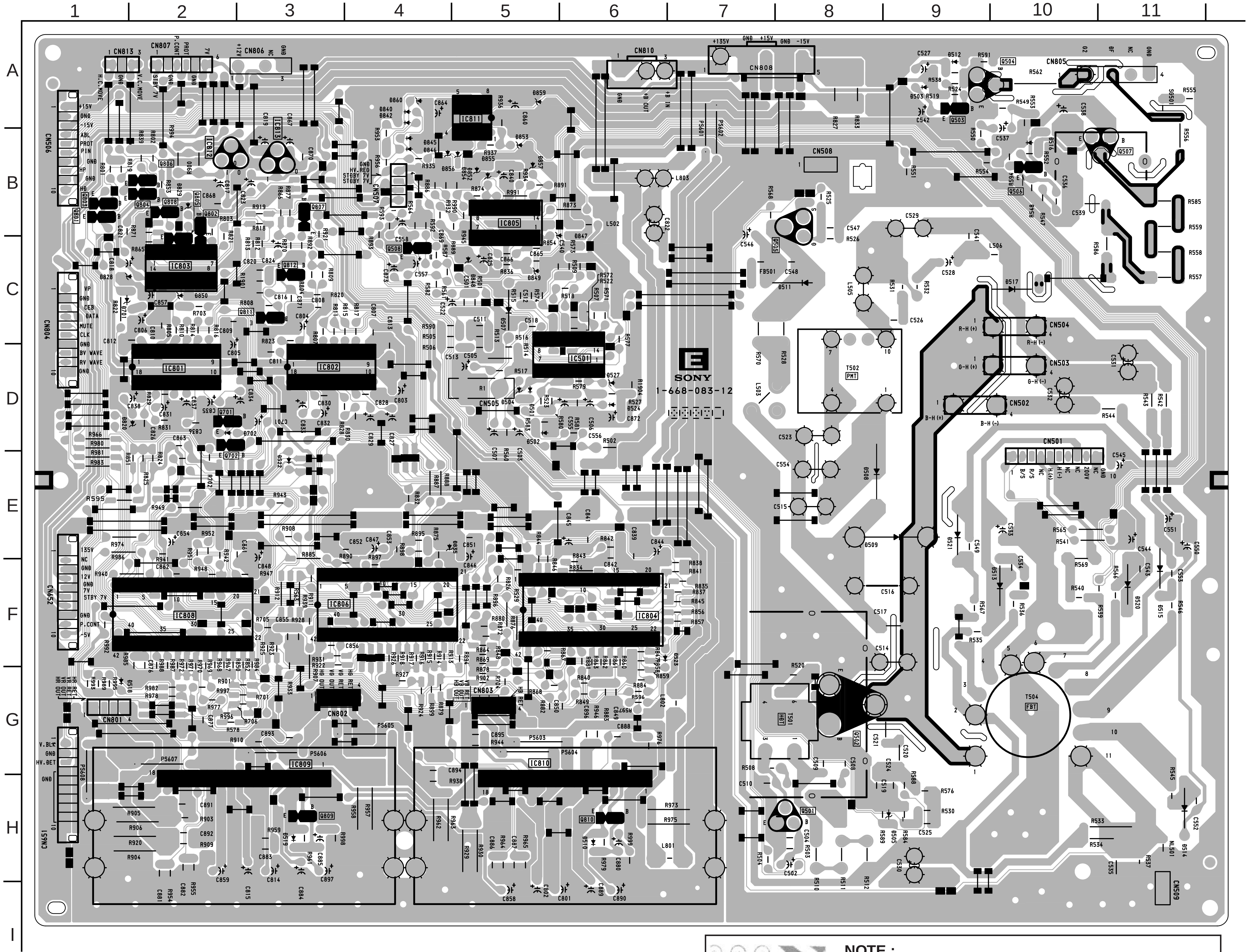


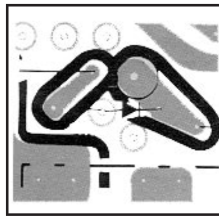
E [H/V-DEF, HV]

– E Board –

E BOARD

Ref.	Location
DIODE	
D501	D-5
D502	D-5
D503	A-9
D504	D-5
D507	C-5
D508	E-8
D509	E-9
D510	H-6
D511	C-8
D512	A-9
D513	F-10
D514	H-11
D515	F-11
D517	C-10
D519	H-3
D520	F-11
D521	E-9
D522	E-3
D523	F-7
D524	D-6
D527	D-6
D701	C-1
D702	D-2
D820	D-2
D829	B-2
D835	E-5
D840	A-4
D842	A-4
D845	B-4
D846	B-4
TRANSISTOR	
Q501	H-8
Q502	G-8
Q503	A-9
Q504	A-10
Q505	B-8
Q506	B-10
Q507	B-11
Q801	B-1
Q802	B-2
Q803	B-1
Q804	B-2
Q805	B-2
Q806	B-2
Q807	B-3
Q808	B-2
Q809	H-3
Q810	H-
Q811	C-3
Q812	C-3
IC	
IC501	D-6
IC801	D-2
IC802	D-3
IC803	C-2
IC804	F-6
IC805	B-5
IC806	F-4
IC808	F-2
IC809	H-3
IC810	H-6
IC811	A-5
IC812	B-2
IC813	B-3

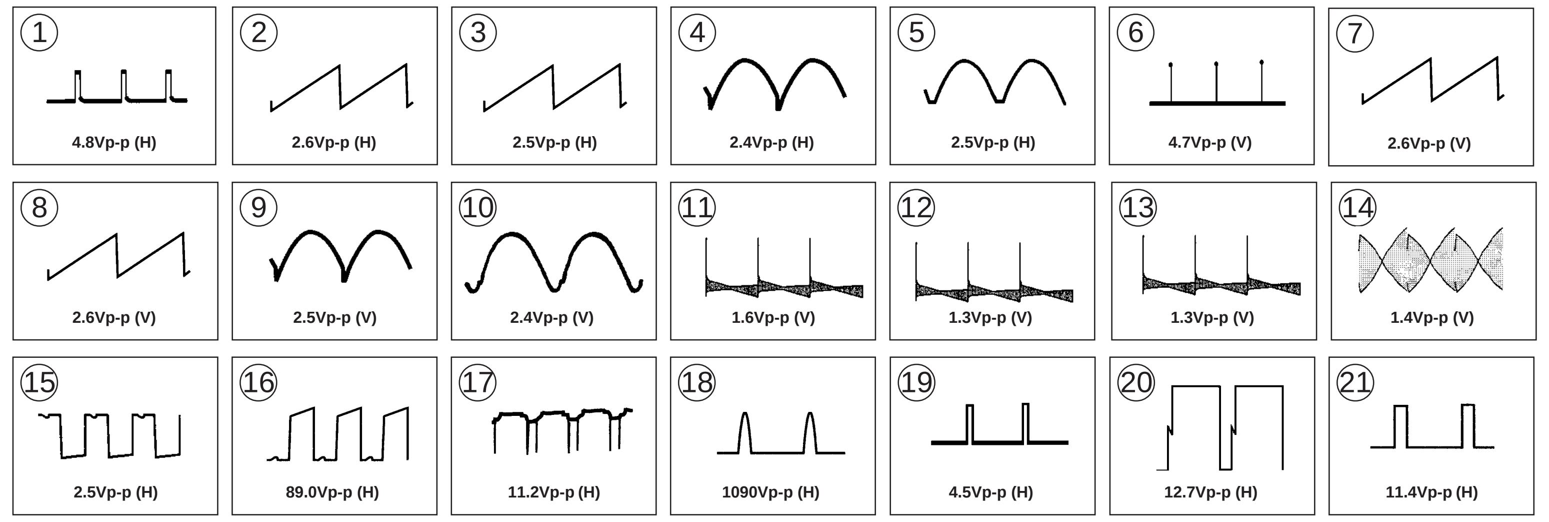




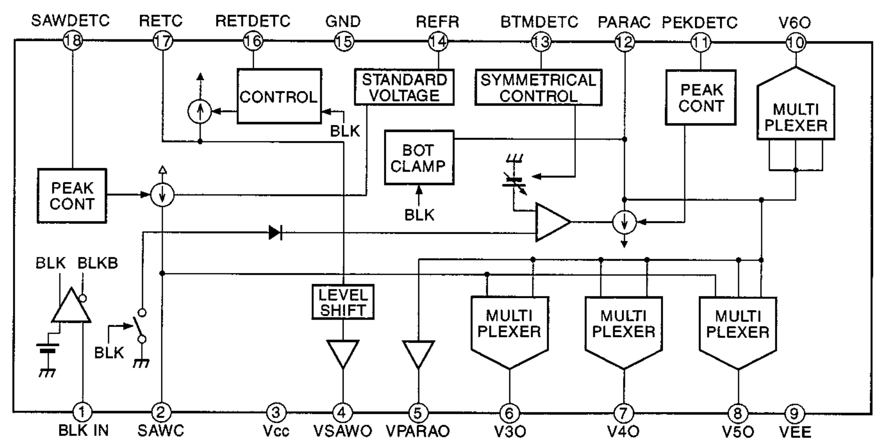
NOTE :
The circuit indicated as left contains hight voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

Schematic diagrams
← H1 H2 boards

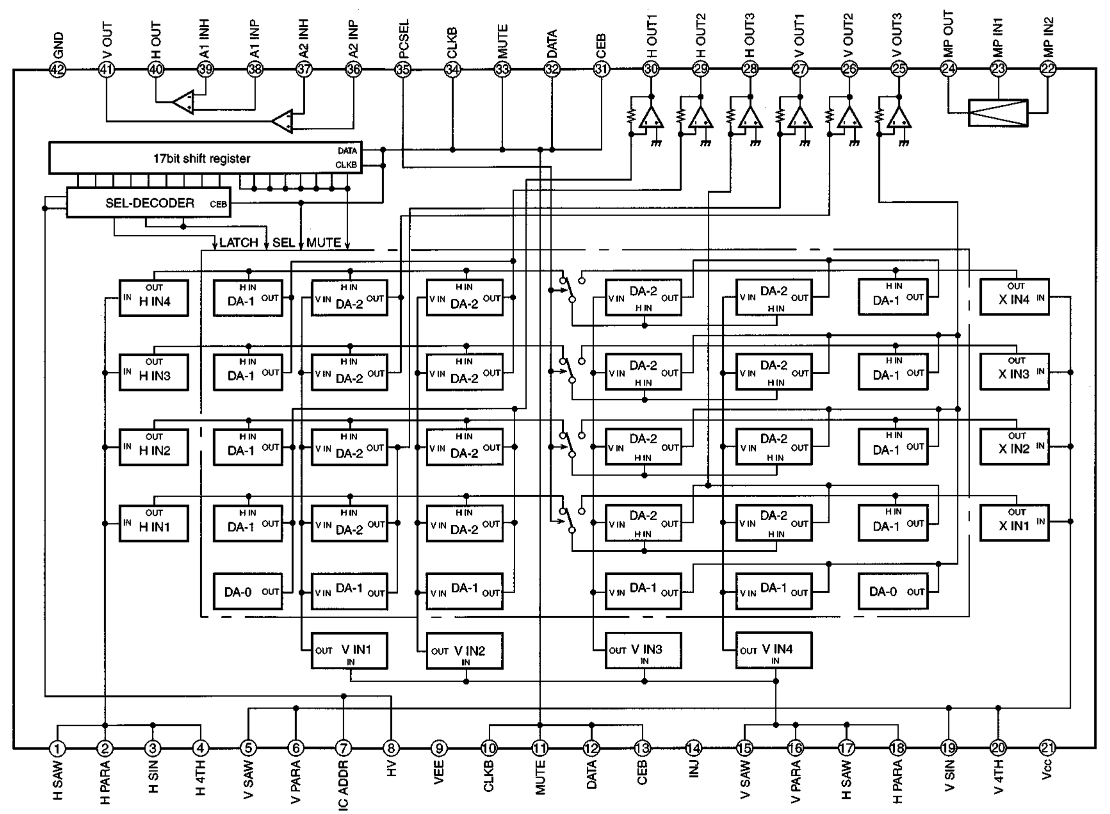
• E BOARD WAVEFORMS

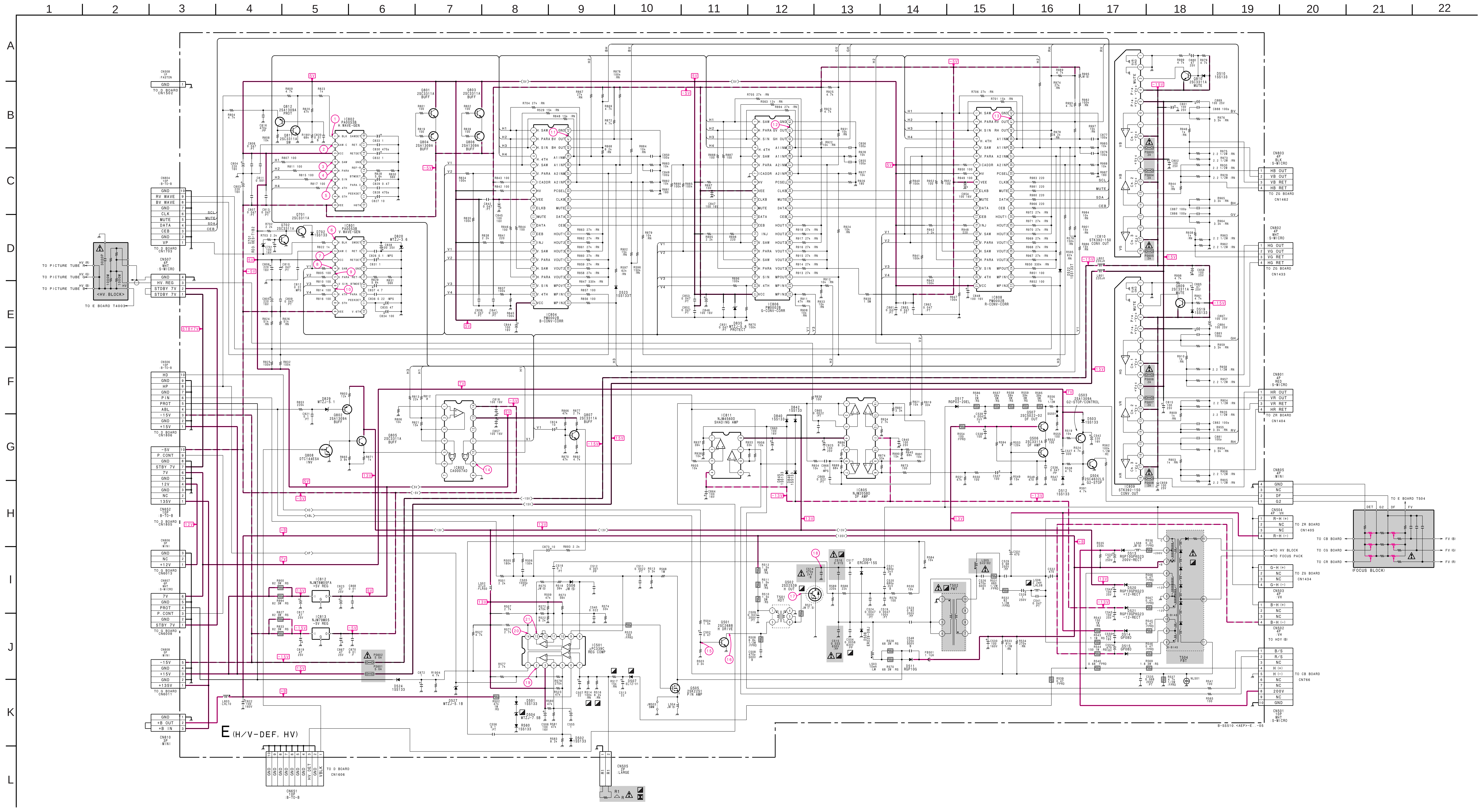


E BOARD : IC801,802 PA0053B



E BOARD : IC804,806,808 PM0002B





E BOARD IC VOLTAGE LIST

REF.	NO.	VOL.	REF.	NO.	VOL.	REF.	NO.	VOL.
IC501	1	0.1		28	0.1		11	5.0
	2	0.7		29	-0.1		12	0.2
	3	12.2		30	-0.5		13	4.6
	4	6.1		31	4.6		14	-2.0
	5	1.8		32	0.2		15	0
	6	8.3		33	5.0		16	0.8
	7	7.9		34	4.7		17	0
	8	1.6		35	0.1		18	-0.8
	9	2.5		36	0.1		19	0.1
	10	4.5		37	0		20	-0.5
	11	1.8		38	0.1		21	5.0
	12	GND		39	0		22	0
	13	1.6		40	0.2		23	0
	14	10.1		41	0		24	0.1
IC801	1	0.2		42	GND		25	-0.1
	2	1.1	IC805	1	7.4		26	0.1
	3	5.0		2	7.4		27	0
	4	0		3	7.2		28	0.1
	5	-0.8		4	12.3		29	0.2
	6	0		5	0		30	-0.2
	7	-1.1		6	0		31	4.6
	9	-5.0		7	0		32	0.2
	11	0.5		8	-0.8		33	5.0
	12	-0.9		9	0		34	4.7
	13	0.3		10	0		35	0.1
	14	1.2		11	-12.3		36	0.1
	15	GND		12	0		37	0
	16	-1.7		13	0		38	0.1
	17	1.2		14	0.9		39	0
	18	-1.5	IC806	1	0		40	0.2
IC802	1	0.4		2	-0.8		41	0
	2	1.1		3	0	IC809	1	GND
	3	5.0		4	-1.1		2	GND
	4	0		5	0		3	-13.0
	5	-0.8		6	-0.4		4	-14.2
	6	0		7	GND		5	14.3
	7	-1.1		8	5.0		6	0
	9	-5.0		9	-4.9		7	0
	11	0.5		10	4.7		8	-14.2
	12	-0.9		11	5.0		9	-0.1
	13	0.3		12	0.2		10	14.3
	14	1.2		13	4.6		11	0
	15	GND		14	-2.0		12	-14.2
	16	-1.7		15	0		13	0
	17	1.2		16	0.8		14	0
	18	-1.5		17	GND		15	0.3
IC803	1	0		18	-0.8		16	0.3
	2	0		19	0.1		17	-14.2
	3	0		20	-0.5		18	0.4
	4	0.1		21	5.0	IC810	1	GND
	5	0.9		22	0		2	GND
	6	0		23	-0.4		3	-13.0
	8	GND		24	0.1		4	-14.2
	9	0		25	0.2		5	14.3
	10	0		26	0.1		6	0
	11	0		27	0		7	0
	13	5.0		28	0.1		8	-14.2
	14	-5.0		29	0		9	-0.1
IC804	1	0		30	0.3		10	14.3
	2	-0.8		31	4.6		11	0.2
	3	0		32	0.2		12	-14.2
	4	-1.1		33	5.0		13	0.2
	5	0		34	4.7		14	0.2
	6	-0.4		35	0.1		15	0
	7	-4.9		36	0.1		16	0
	8	5.0		37	0		17	-14.2
	9	-4.9		38	0.1		18	-0.1
	14	-2.0		39	0	IC811	1	0.1
	15	0		40	0.2		2	0.1
	16	-0.8		41	0		3	0
	17	0		42	GND		4	-12.3
	18	-0.8	IC806	1	0		5	GND
	19	0.1		2	-0.8		6	0
	20	-0.5		3	0		7	0
	21	5.0		4	-1.1		8	12.3
	22	0		5	0	IC812	I	6.8
	23	-0.1		6	-0.4		G	GND
	24	0.1		7	5.0		O	5.0
	25	0.1		8	5.0	IC813	I	-11.3
	26	0.1		9	-4.9		G	GND
	27	0		10	4.7		O	-4.9

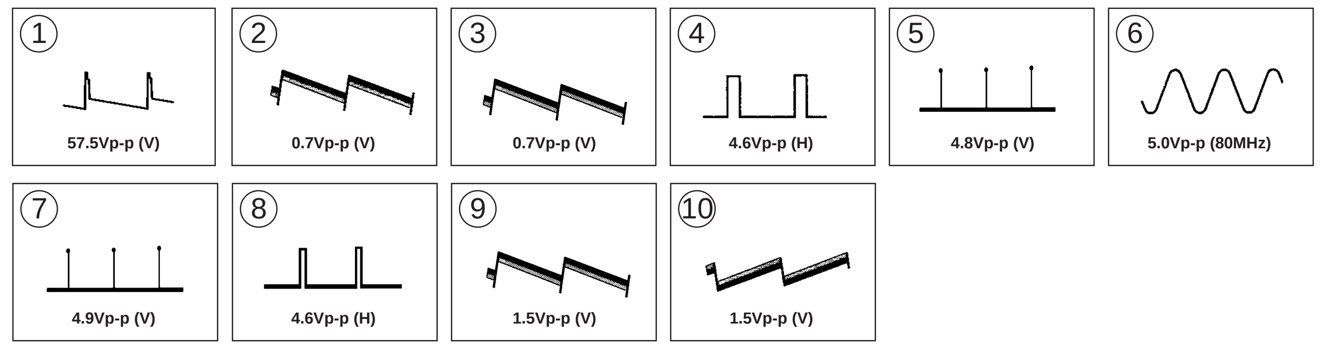
•All voltage are in V.
•Pin numbers which are not described are not used.

E BOARD TRANSISTOR VOLTAGE LIST

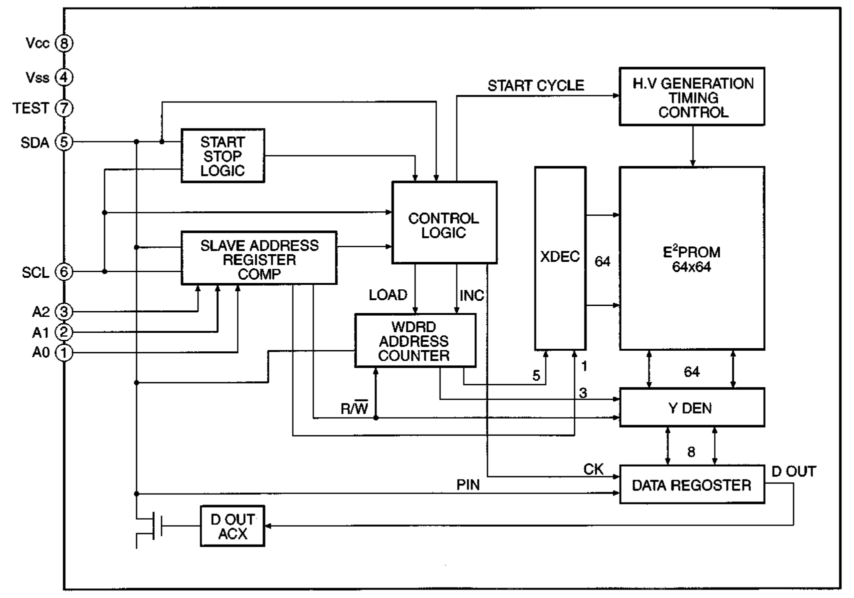
REF.		VOL.
Q501	B	-0.6
	E	GND
	C	48.1
Q502	B	-0.1
	E	GND
	C	137.5
Q503	B	6.9
	E	6.5
	C	0
Q504	B	0
	E	0
	C	450.0
Q506	B	1.7
	E	1.2
	C	12.3
Q507	B	12.3
	E	12.3
	C	660
Q508	B	4.1
	E	3.5
	C	8.3
Q701	B	0.7
	E	GND
	C	0
Q702	B	0.2
	E	GND
	C	4.8
Q801	B	2.3
	E	1.8
	C	5.0
Q802	B	6.0
	E	7.5
	C	1.6
Q803	B	2.3
	E	1.9
	C	5.0
Q804	B	2.3
	E	1.9
	C	-5.0
Q805	B	1.5
	E	0.9
	C	12.3
Q806	B	2.3
	E	1.9
	C	-5.0
Q807	B	2.5
	E	1.9
	C	4.0
Q808	B	0.6
	E	GND
	C	1.5
Q809	B	-14.2
	E	-14.2
	C	-13.1
Q810	B	-14.2
	E	-14.2
	C	-13.1
Q811	B	0.1
	E	GND
	C	0.4
Q812	B	0.6
	E	0
	C	0.1
Q505	G	10.2
	D	20.0
	S	GND

All voltages are in V.

• D BOARD WAVEFORMS



D BOARD : IC1702 ST24C08FM6TR



D BOARD IC VOLTAGE LIST

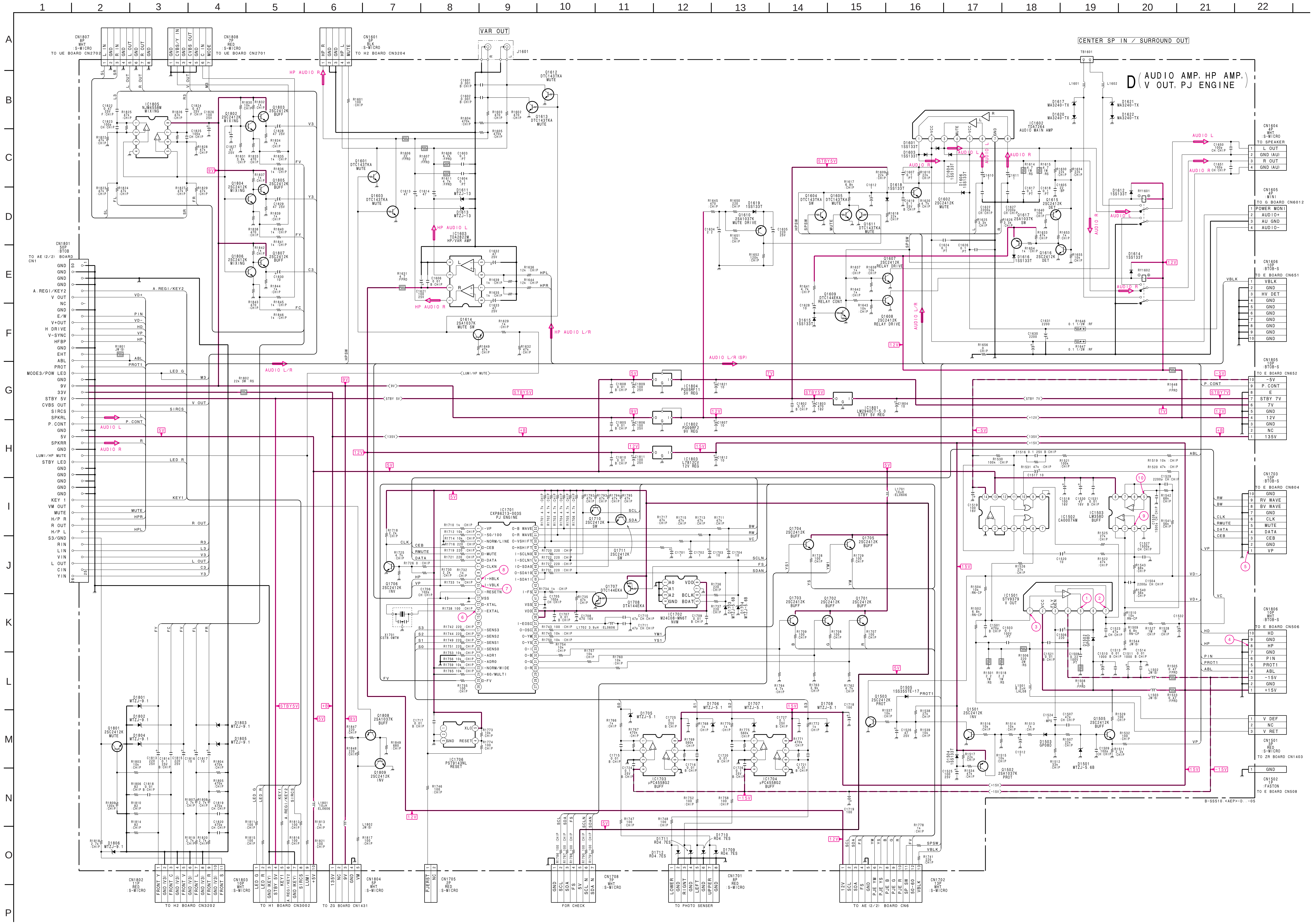
REF.	NO.	VOL.	REF.	NO.	VOL.
IC1501	1	1.1		32	0
	2	14.4		34	0.1
	3	-13.1		35	0.1
	4	-14.3		36	2.8
	5	0.2		37	2.8
	6	14.3		38	5.0
	7	1.1		39	5.0
IC1502	1	GND		40	GND
	2	0		42	4.9
	3	0		44	4.8
	4	0.1		45	4.8
	5	0.1		46	4.4
	6	0.1		47	4.7
	8	GND		48	4.3
	9	0		49	2.2
	10	0.1		50	2.3
	11	-0.4		51	2.3
	13	5.0		52	2.0
	14	-4.9	IC1702	1	GND
IC1503	1	3.1		2	GND
	2	3.1		3	GND
	3	3.1		4	GND
	4	GND		5	4.8
	5	3.0		6	4.8
	6	3.0		7	GND
	7	3.0		8	5.0
	8	5.0	IC1703	1	3.9
IC1602	1	0		2	0
	2	23.0		3	GND
	3	0		4	-14.4
	4	20.5		5	GND
	5	-23.0		6	0
	6	0		7	5.8
	7	GND		8	14.6
	8	0	IC1704	1	0.3
IC1603	1	4.1		2	0
	2	9.0		3	GND
	3	4.1		4	-14.4
	4	GND		5	GND
	5	0.6		6	0
	6	0		7	2.9
	7	0		8	14.6
	8	0.6	IC1706	2	GND
IC1701	1	0.2		3	GND
	2	0		4	4.9
	3	0		5	5.0
	4	4.7	IC1801	I	5.0
	5	5.0		G	GND
	6	0.2		O	7.0
	7	0.2	IC1802	I	13.8
	9	0.7		G	GND
	10	0.2		O	9.1
	11	5.0	IC1803	I	14.6
	12	GND		G	GND
	13	2.4		O	12.1
	14	2.1	IC1804	I	6.7
	17	2.5		G	GND
	18	0.2		O	5.0
	19	3.9	IC1805	1	4.8
	20	3.1		2	2.4
	21	0		3	2.4
	22	0		4	GND
	23	5.0		5	2.4
	24	5.0		6	2.4
	25	0		7	4.8
	30	0.1		8	9.0
	31	0			

•All voltage are in V.
•Pin numbers which are not described are not used.

D BOARD TRANSISTOR VOLTAGE LIST

REF.		VOL.	REF.		VOL.
Q1501	B	0.7	Q1701	B	0.1
	E	GND		E	0.2
	C	0		C	5.0
Q1502	B	14.5	Q1702	B	0
	E	14.6		E	0.2
	C	2.0		C	5.0
Q1503	B	0	Q1703	B	0
	E	GND		E	0.2
	C	3.0		C	5.0
Q1505	B	-0.5	Q1704	B	0
	E	0.2		E	0
	C	14.4		C	5.0
Q1601	B	0.7	Q1705	B	0
	E	GND		E	0
	C	0		C	5.0
Q1602	B	1.1	Q1706	B	0.2
	E	0.6		E	GND
	C	20.7		C	4.7
Q1603	B	0.7	Q1707	B	0
	E	GND		E	GND
	C	0		C	5.0
Q1604	B	0.3	Q1708	B	4.9
	E	GND		E	5.0
	C	1.1		C	0
Q1605	B	0.8	Q1710	B	4.6
	E	GND		E	4.7
	C	0.1		C	4.7
Q1607	B	0.3	Q1711	B	4.6
	E	GND		E	4.3
	C	13.9		C	4.0
Q1608	B	0.3	Q1801	B	0
	E	GND		E	GND
	C	13.9		C	0
Q1609	B	0	Q1802	B	2.4
	E	GND		E	1.8
	C	0.3		C	5.0
Q1610	B	13.9	Q1803	B	5.0
	E	13.7		E	4.3
	C	0.1		C	9.0
Q1611	B	0	Q1804	B	2.4
	E	GND		E	1.7
	C	0		C	5.0
Q1612	B	0.7	Q1805	B	5.0
	E	GND		E	4.4
	C	0		C	9.0
Q1613	B	0.7	Q1806	B	2.4
	E	GND		E	1.8
	C	0		C	5.1
Q1614	B	0.2	Q1807	B	5.1
	E	0.8		E	4.4
	C	0.7		C	9.0
Q1615	B	0	Q1808	B	5.8
	E	0		E	6.4
	C	0.2		C	0.7
Q1616	B	0	Q1809	B	0.7
	E	GND		E	GND
	C	0.2		C	1.2
Q1617	B	11.7			
	E	11.8			
	C	0.4			

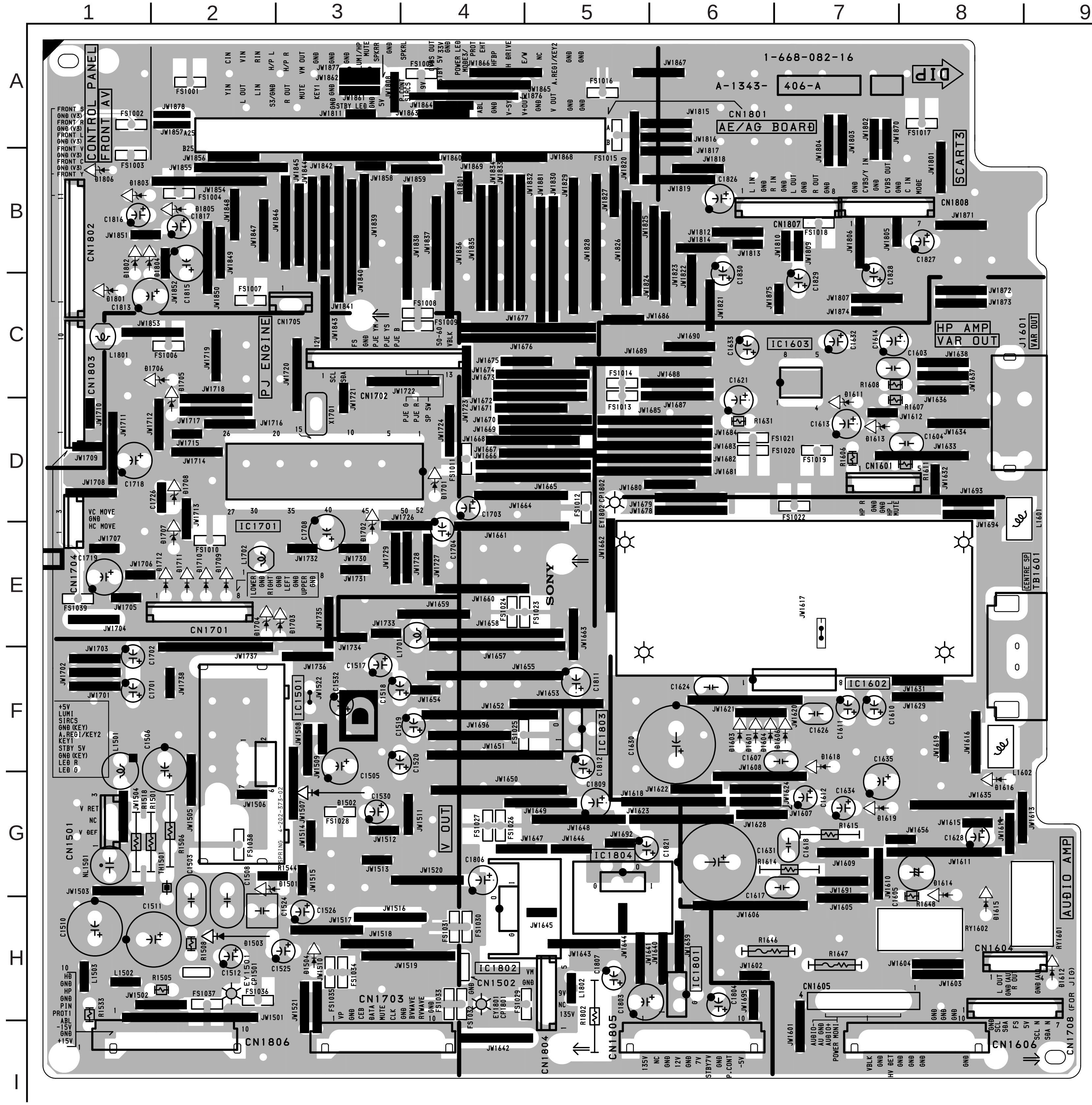
All voltages are in V.



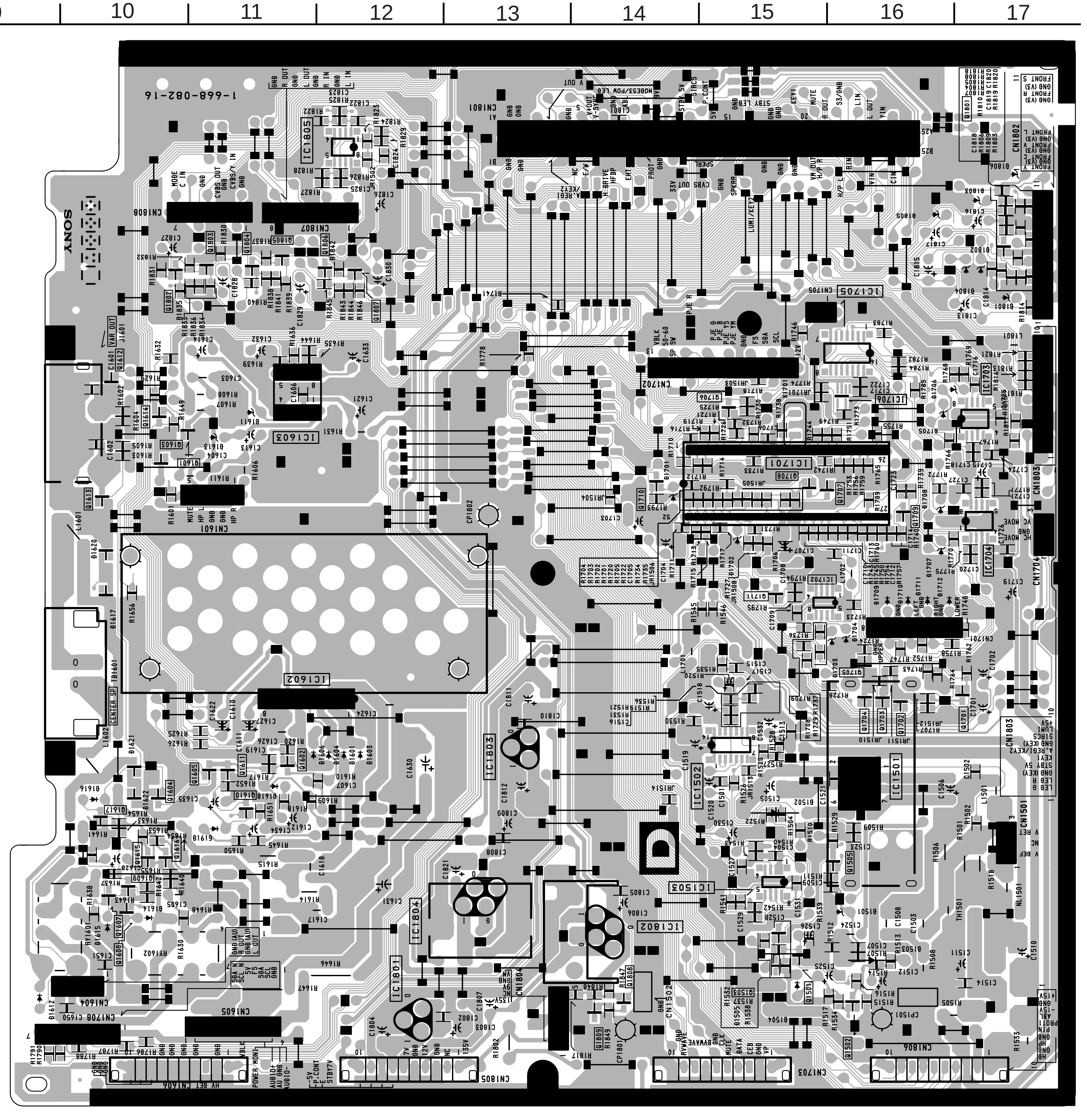
Schematic diagram
← E board

Schematic diagram
D board →

– D Board –



< Component Side >



< Conductor Side >

D BOARD

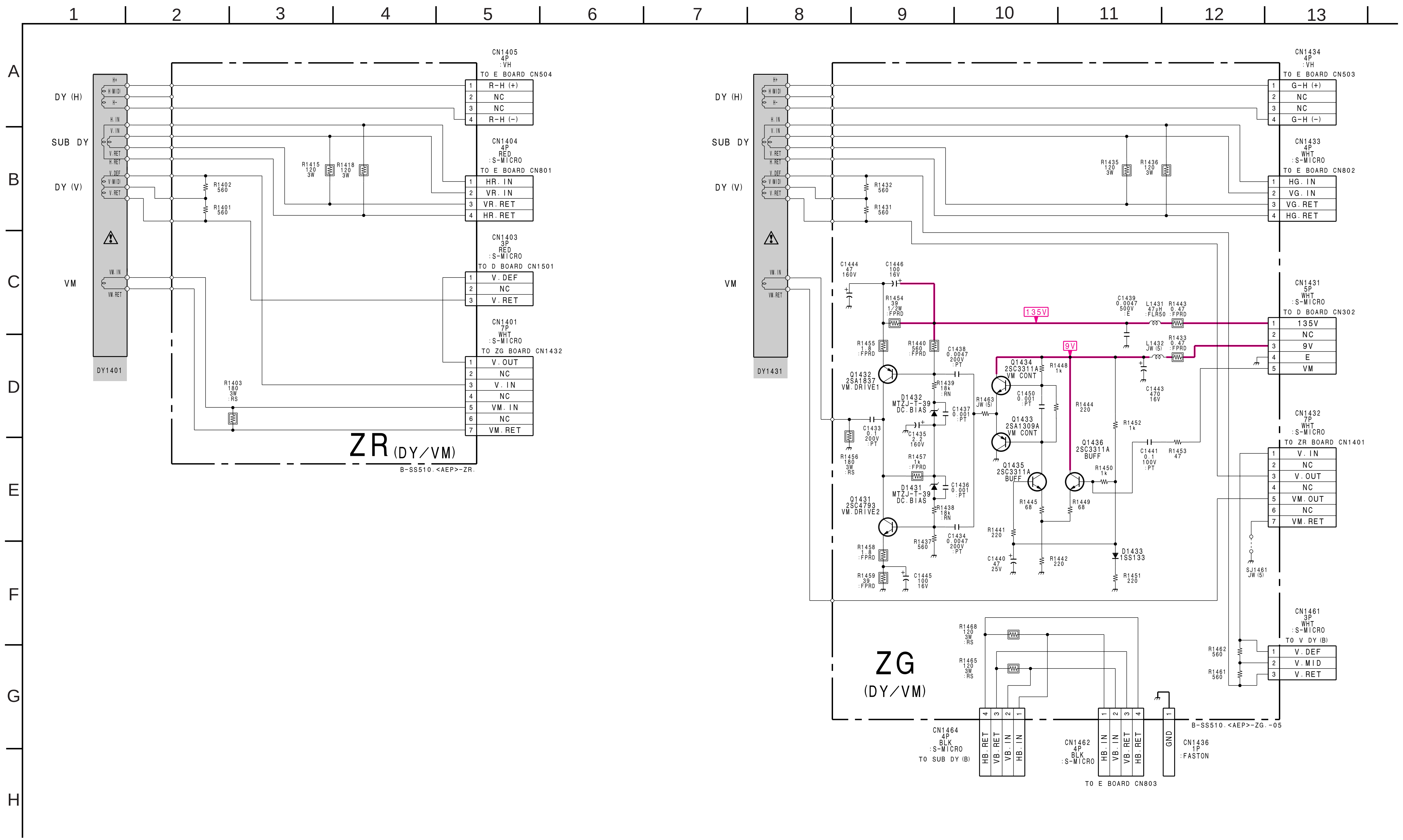
DIODE		*
D1501	G-2,G-16	–
D1502	G-3,G-15	–
D1503	H-2,H-16	–
D1504	H-3,H15	–
D1505	H-15	③
D1601	F-6,F-12	–
D1603	F-6,F-12	–
D1604	F-6,F-12	–
D1606	F-6,F-12	–
D1611	D-7,D-11	–
D1612	H-9	–
D1613	D-7,D-11	–
D1614	G-8,G-10	–
D1615	H-8,H-10	–
D1616	G-7,G-10	–
D1618	F-7,F-11	–
D1619	G-7,G-11	–
D1620	E-10	④
D1621	F-10	④
D1622	G-10	④
D1703	E-3,E-16	–
D1704	E-2,E-16	–
D1705	D-2,D-16	–
D1706	C-2,C-16	–
D1707	E-2,E-16	–
D1708	D-2,D-16	–
D1709	E-2,E-16	–
D1710	E-2,E-16	–
D1711	E-2,E-16	–
D1712	E-2,E-16	–
D1801	C-1,C-17	–
D1802	B-1,B-17	–
D1803	B-1,B-17	–
D1804	B-1,B-17	–
D1805	B-2,B-16	–
D1806	B-1,B-17	–

TRANSISTOR		*
Q1501	H-15	①
Q1502	H-16	①
Q1503	H-15	①
Q1505	G-16	①
Q1601	D-10	①
Q1602	F-11	①
Q1603	D-10	①
Q1604	F-10	①
Q1605	F-10	①
Q1607	G-10	①
Q1608	G-10	①
Q1609	G-10	①
Q1610	F-11	①
Q1611	F-11	①
Q1612	C-10	①
Q1613	D-10	①
Q1614	D-10	①
Q1615	G-10	①
Q1616	G-10	①
Q1617	F-10	①
Q1701	F-17	①
Q1702	F-16	①
Q1703	F-16	①
Q1704	F-16	①
Q1705	E-16	①
Q1706	C-15	①
Q1707	D-15	①
Q1708	D-15	①
Q1709	D-16	①
Q1710	D-14	①
Q1711	E-15	①
Q1801	B-17	①
Q1802	B-10	①
Q1803	B-11	①
Q1804	B-11	①
Q1805	B-11	①
Q1806	B-12	①
Q1807	B-12	①
Q1808	H-14	①
Q1809	H-14	①

IC	
IC1501	F-2,F-16
IC1502	F-15
IC1503	G-15
IC1602	F-7,F-11
IC1603	C-7,C-11
IC1701	D-3,D-15
IC1702	E-15
IC1703	D-17
IC1704	D-17
IC1706	C-16
IC1801	H-6,H-12
IC1802	H-4,H-14
IC1803	F-5,F-13
IC1804	G-5,G-13
IC1805	A-12

∗: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 46)

Schematic diagrams ZG ZR boards ➡



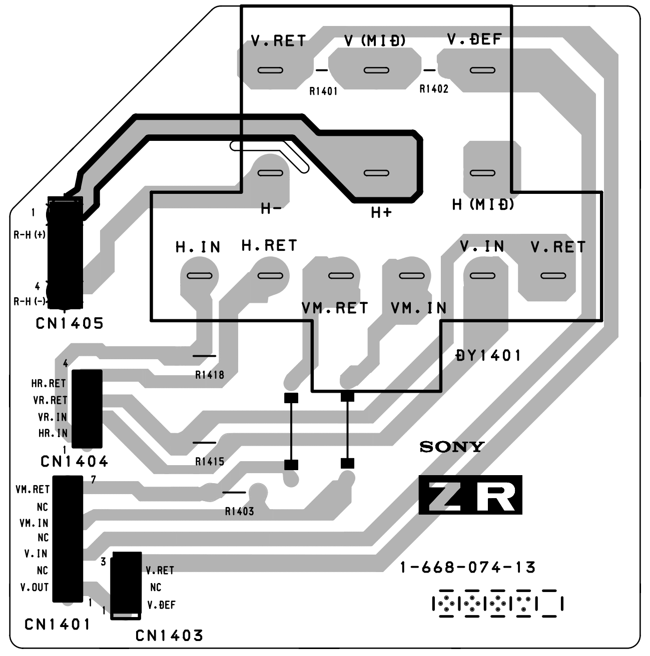
ZG BOARD TRANSISTOR VOLTAGE LIST

REF.		VOL.
Q1431	B	1.0
	E	0.5
	C	68.6
Q1432	B	134.5
	E	134.9
	C	68.6
Q1434	B	5.9
	E	6.1
	C	GND
Q1435	B	6.5
	E	6.1
	C	9.0
Q1435	B	2.2
	E	1.6
	C	5.9
Q1436	B	2.2
	E	1.6
	C	9.0

All voltages are in V.

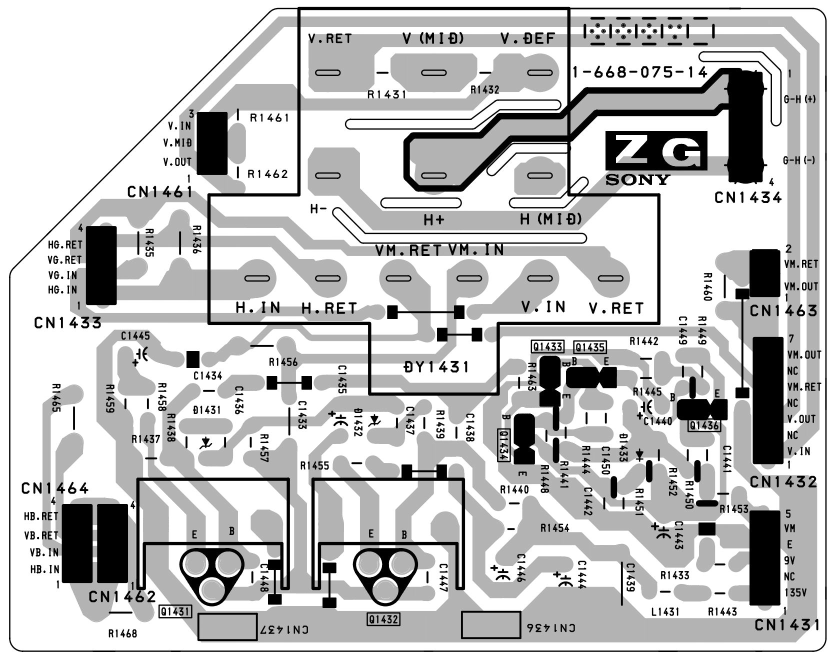
ZR [DY/VM]

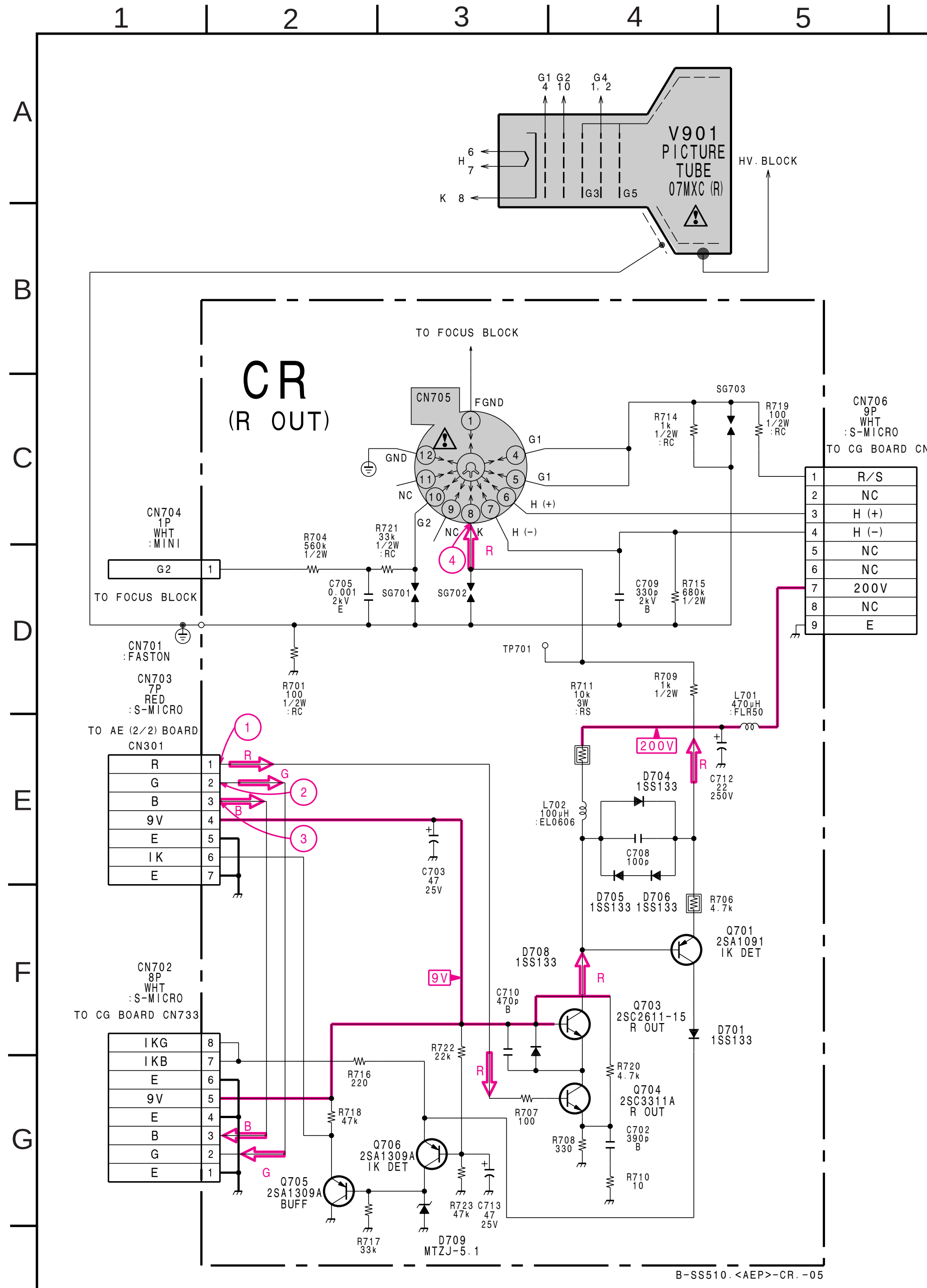
– ZR Board –



ZG [DY/VM]

– ZG Board –



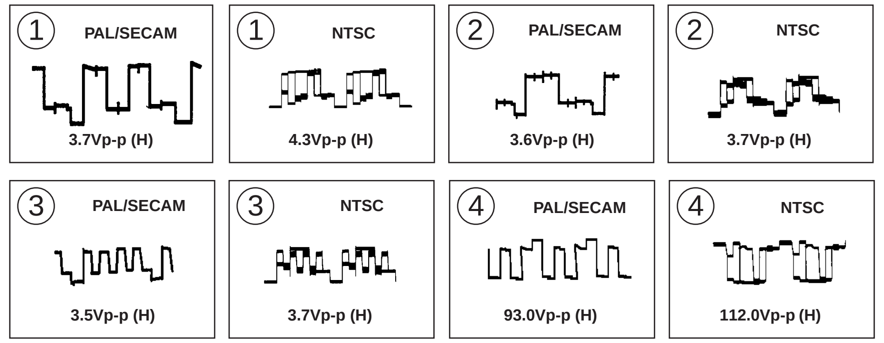


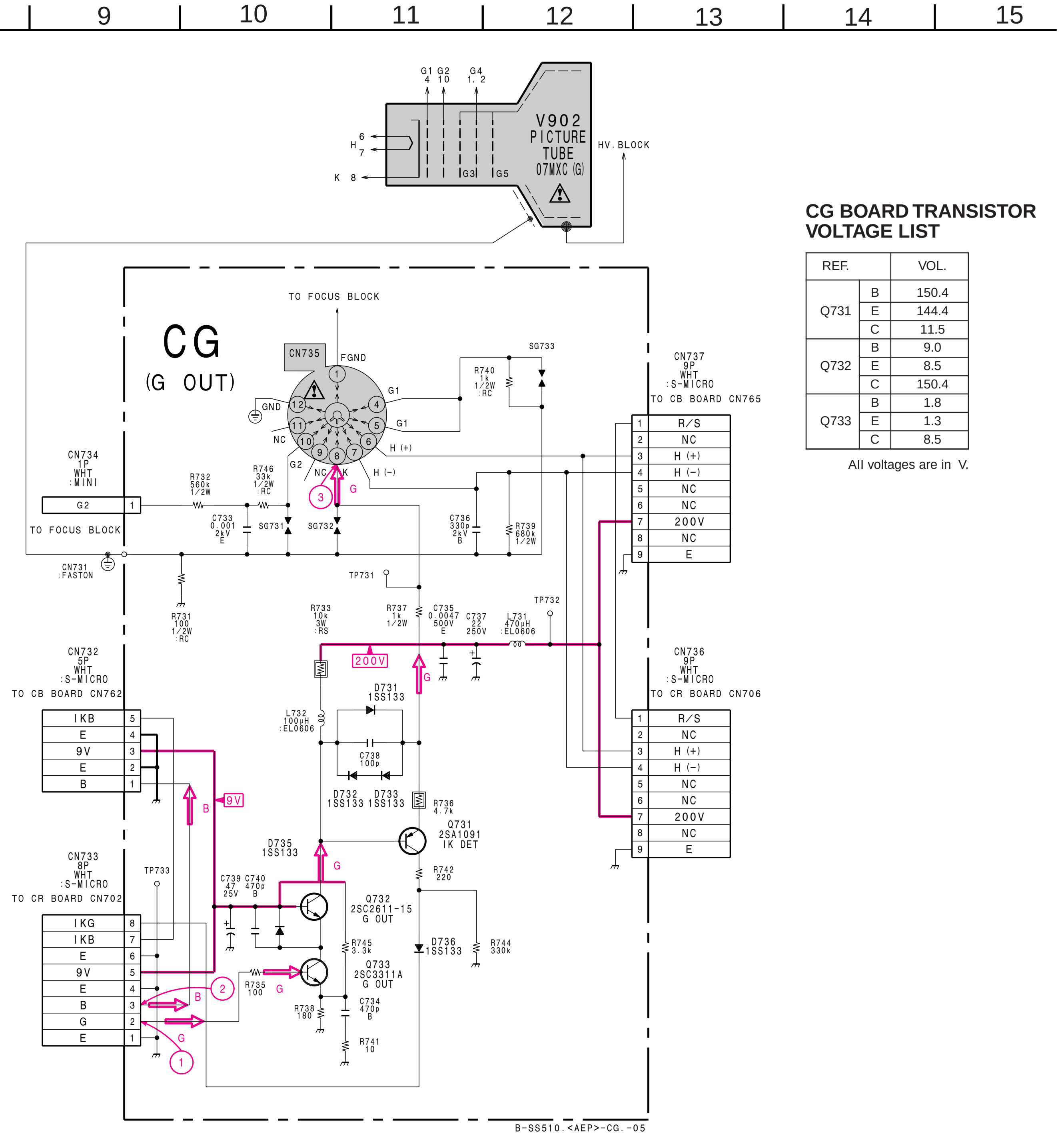
CR BOARD TRANSISTOR VOLTAGE LIST

REF.		VOL.
Q701	B	160.9
	E	156.9
	C	11.3
Q703	B	9.0
	E	8.5
	C	160.9
Q704	B	1.8
	E	1.2
	C	8.5
Q705	B	3.4
	E	3.2
	C	GND
Q706	B	5.7
	E	10.9
	C	3.4

All voltages are in V.

• CR BOARD WAVEFORMS



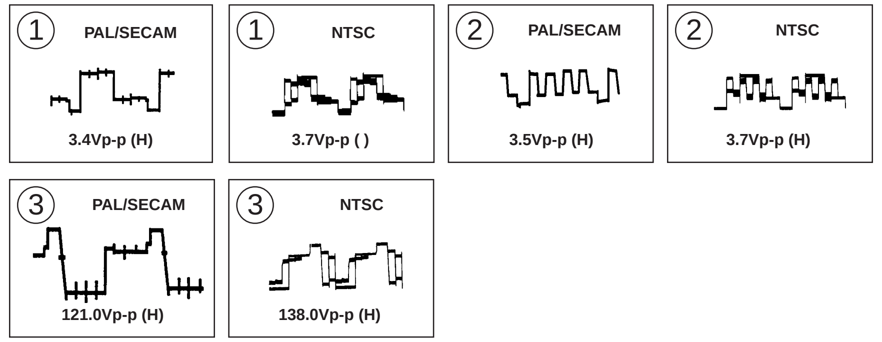


CG BOARD TRANSISTOR VOLTAGE LIST

REF.		VOL.
Q731	B	150.4
	E	144.4
	C	11.5
Q732	B	9.0
	E	8.5
	C	150.4
Q733	B	1.8
	E	1.3
	C	8.5

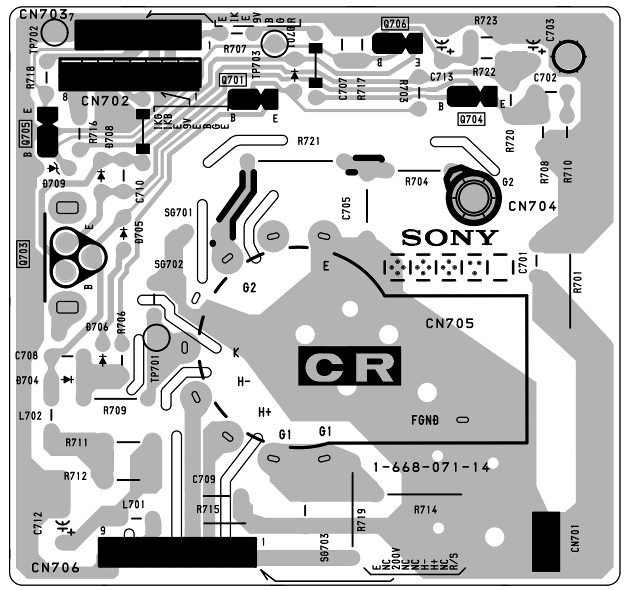
All voltages are in V.

• CG BOARD WAVEFORMS



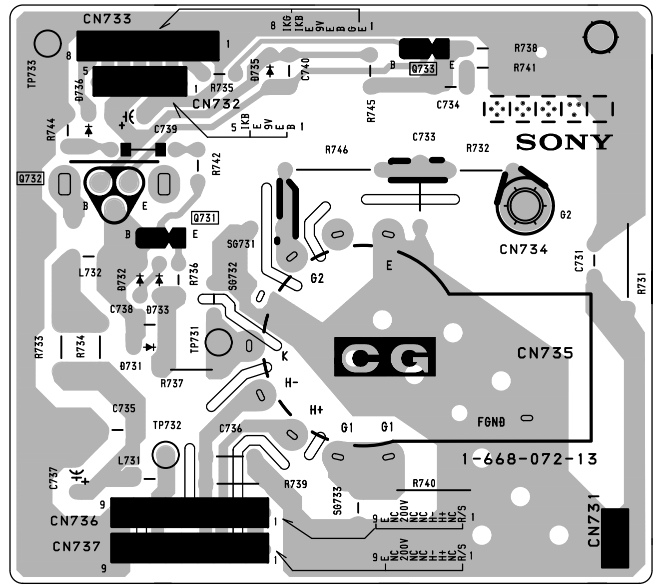
CR [R OUT]

– CR Board –



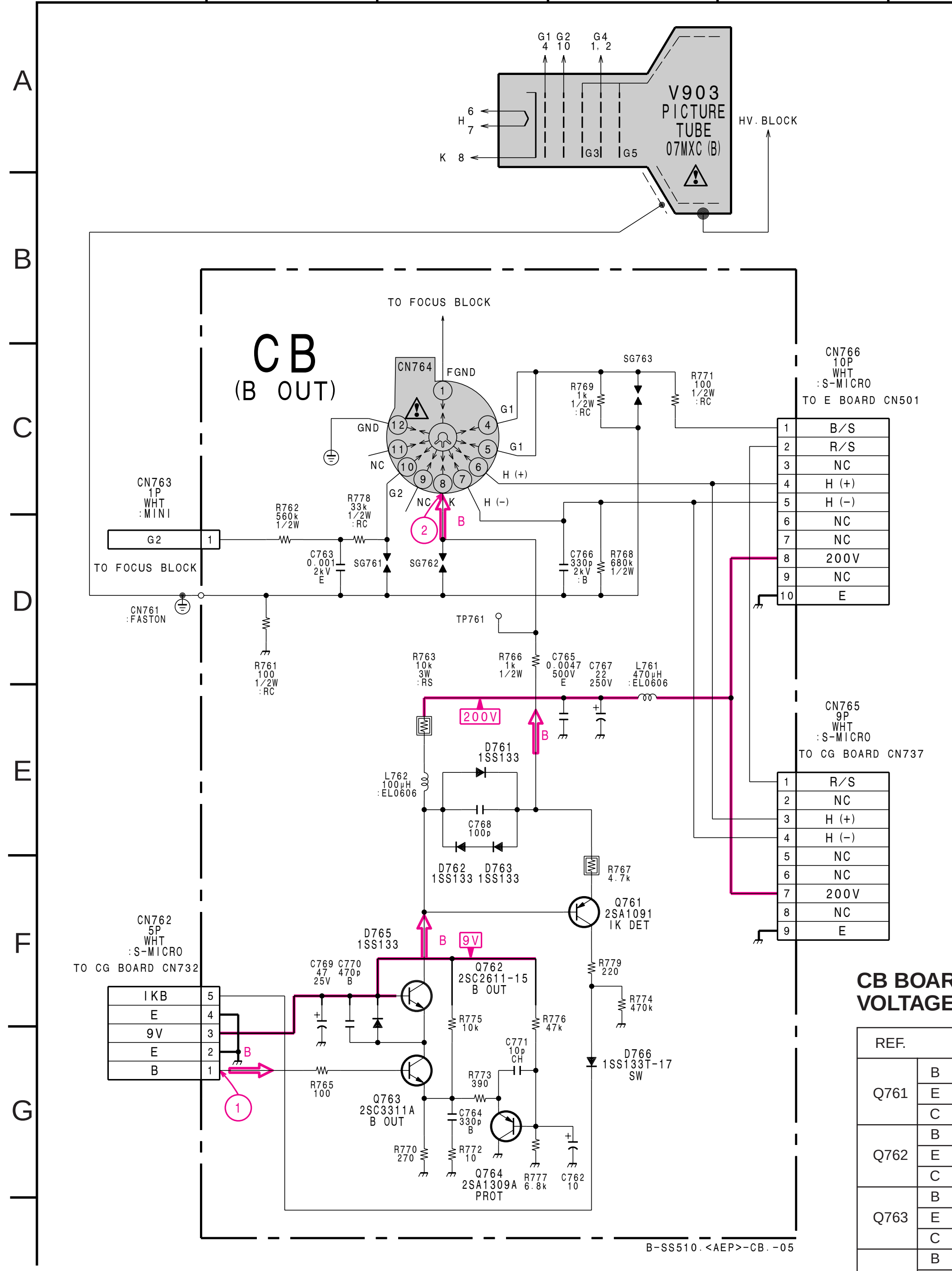
CG [G OUT]

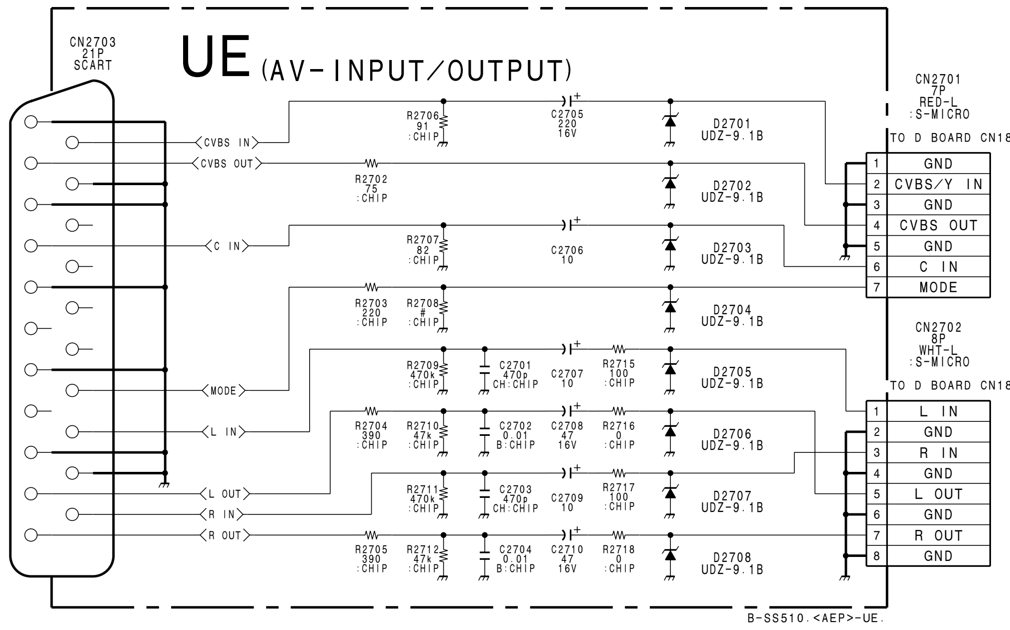
– CG Board –



Schematic diagrams
← CG CR boards

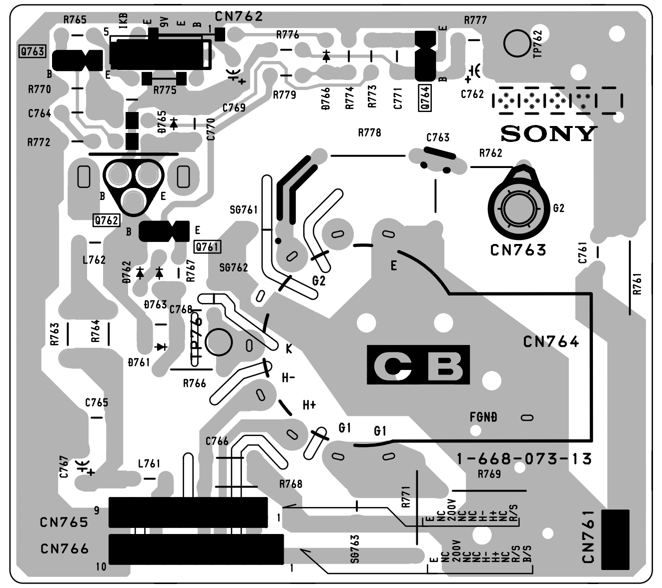
Schematic diagrams
CB UE boards →





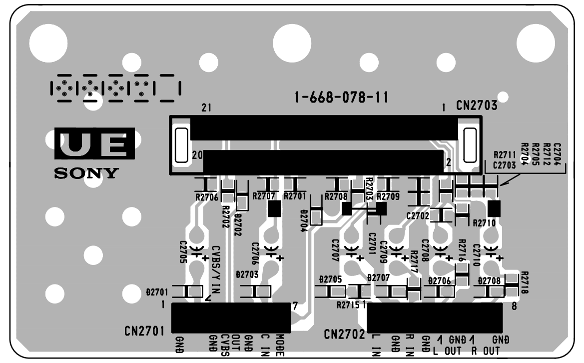
CB [B OUT]

– CB Board –



UE [AV-INPUT/OUTPUT]

– UE Board –

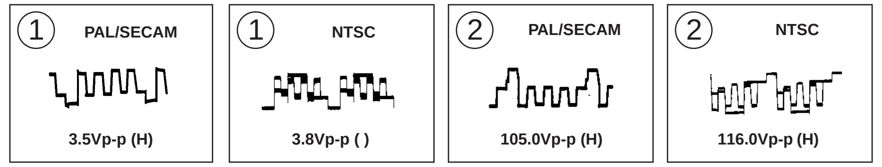


CB BOARD TRANSISTOR VOLTAGE LIST

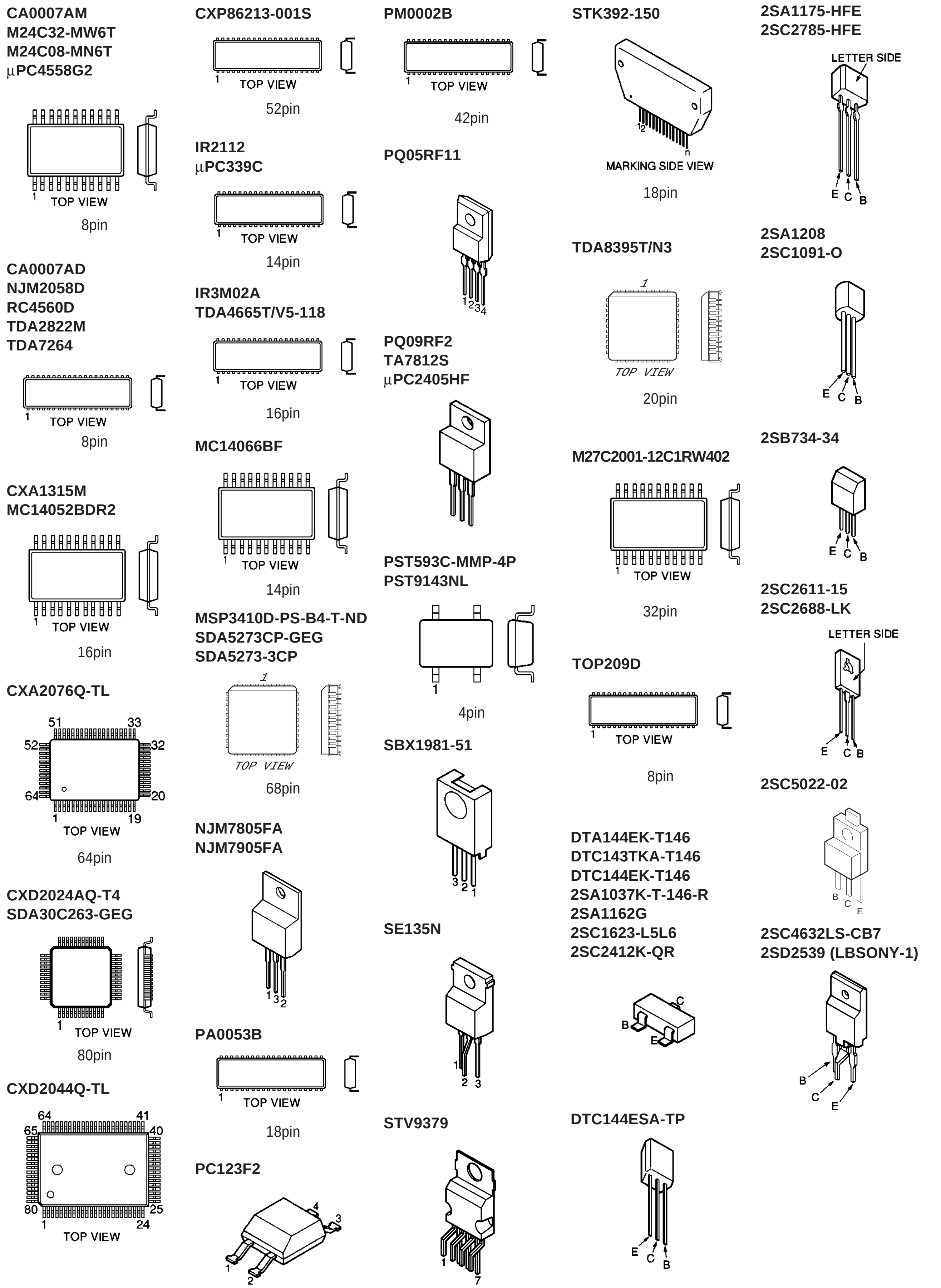
REF.		VOL.
Q761	B	155.2
	E	149.4
	C	9.4
Q762	B	9.0
	E	8.5
	C	155.2
Q763	B	1.7
	E	1.2
	C	8.5
Q764	B	1.1
	E	1.2
	C	GND

All voltages are in V.

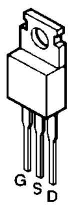
• CB BOARD WAVEFORMS



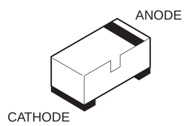
6-5. SEMICONDUCTORS



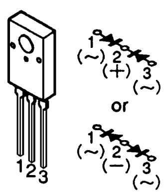
2SK2251-01-F119



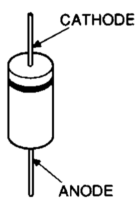
BAS216



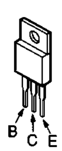
D10SC6M-4012



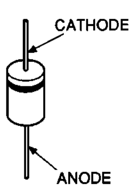
D2S4M
D4SBS4-F



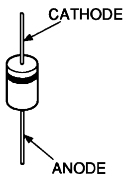
IRFI744G-LF



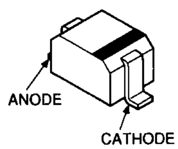
EL1Z
GP08D
MTZ-T-77-9.1A
S2L40F
UF4005PKG23



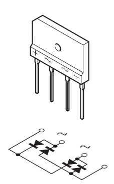
ERC06-15S
ERD29-08J
S2LA20F



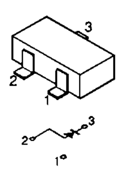
DTZ33B
DTZ6.8B
DTZ9.1
RD5.6S-B
UDZ-TE-17-6.8B
1SS355TE-17



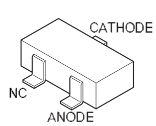
D6SB6OL
RBA-406B



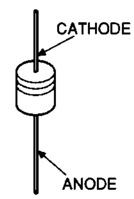
MA3030-H(TX)



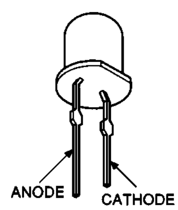
MA3240-TX



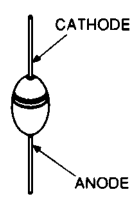
MTZJ-13
MTZJ-30B
MTZJ-7.5B
RD13ES-B2
RD20ES-B2
RD3.6ES-B1
RD39ES-B2
RD4.7ESB2
RD4.7ES-TIB
RD5.1ES-B1
RD5.1ES-B2
RD5.6ES-B2
RD7.5ES-B2
1SS119-25
1SS133T-77



SLA-580LT3F



U05G



SECTION 7
EXPLODED VIEWS

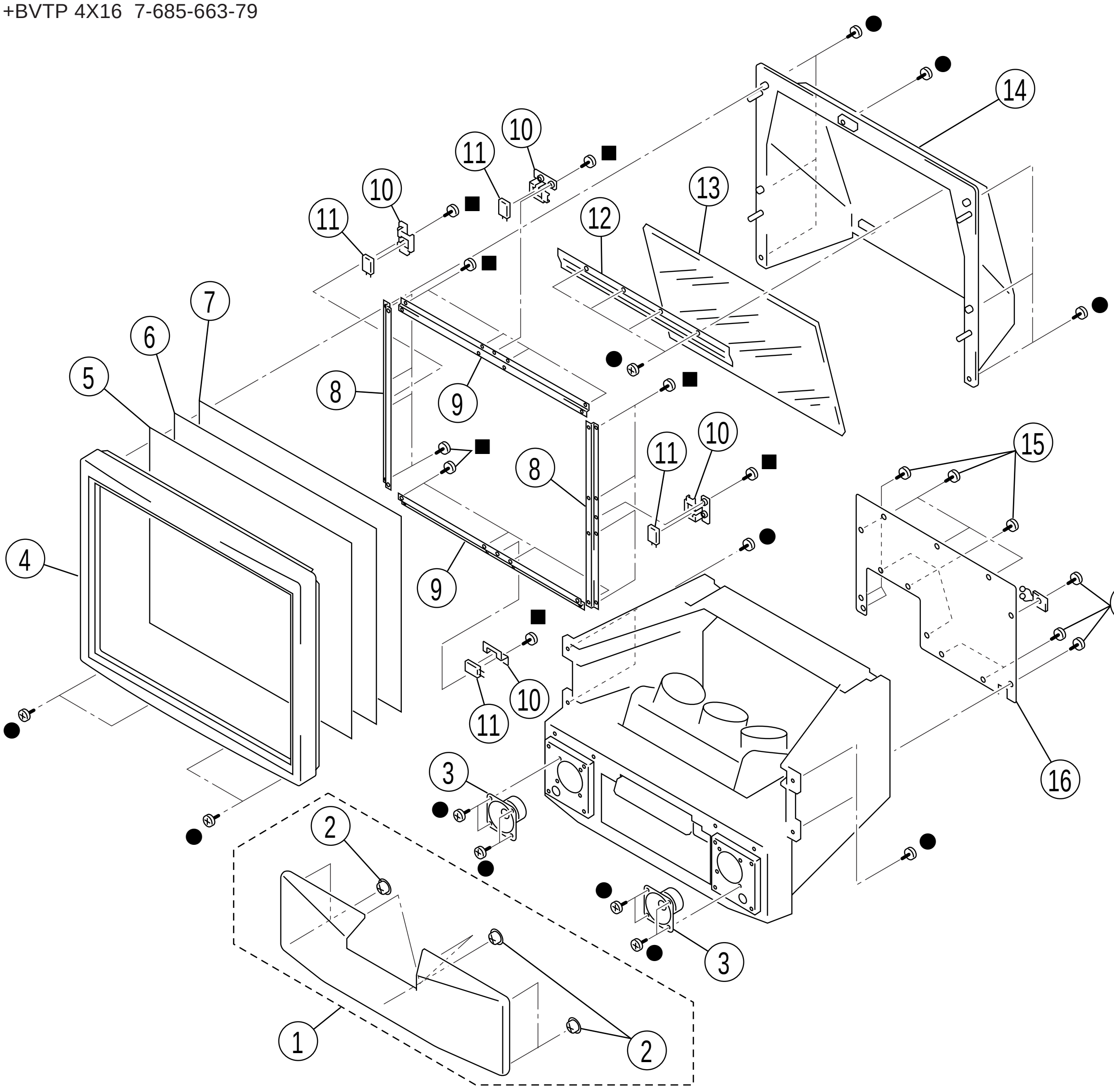
NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

7-1. SCREEN AND COVER

■ : +BVTP 4X12 7-685-661-79
● : +BVTP 4X16 7-685-663-79

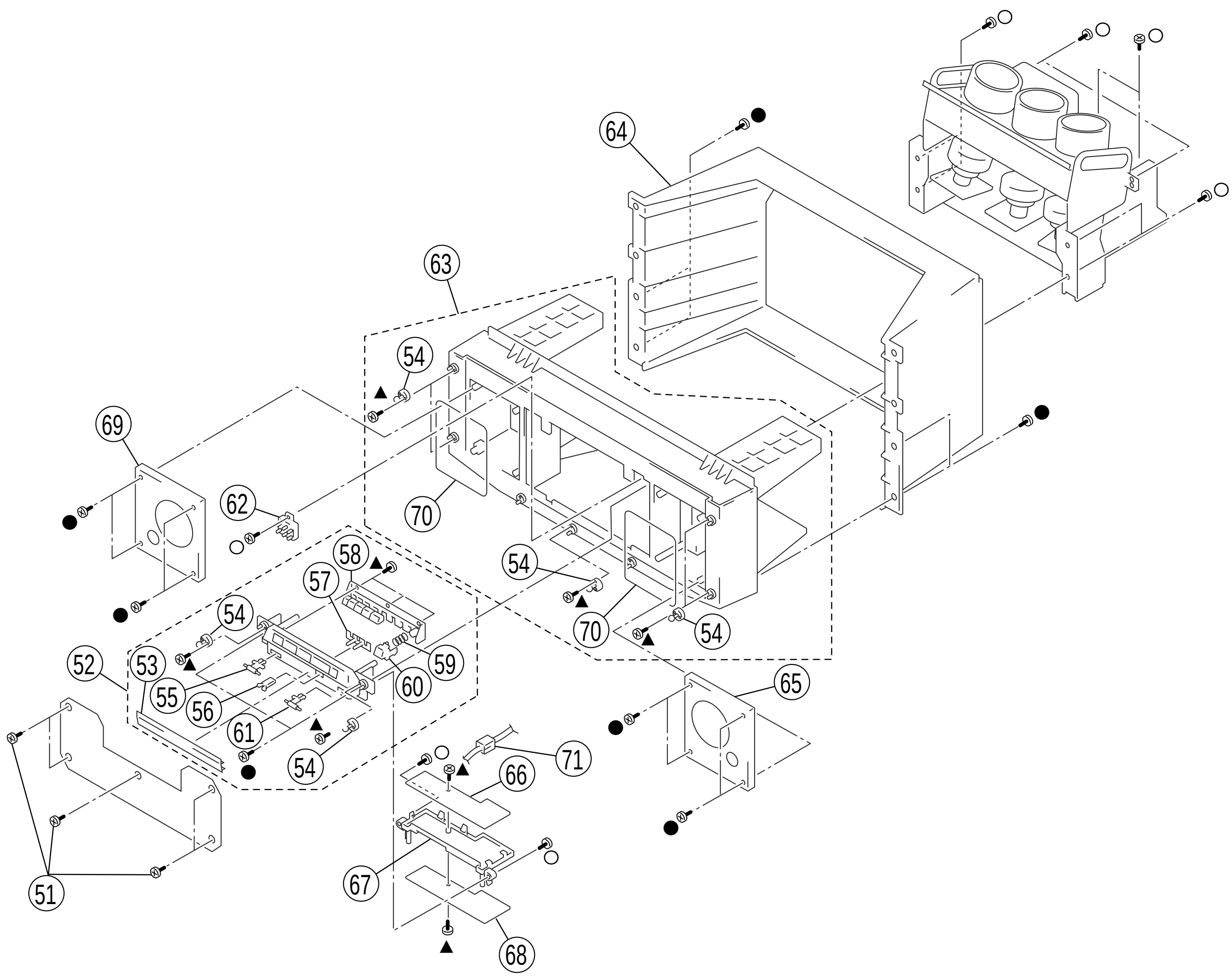


REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
1	X-4036-953-1	GRILLE ASSY, SPEAKER	2	9	* 4-063-160-01	HOLDER (H), SCREEN	
2	4-838-438-00	LATCH		10	* 4-063-173-01	HOLDER, SENSOR	
3	1-505-426-11	SPEAKER (10.6CM)		11	1-528-864-11	BATTERY, SOLAR	
4	X-4036-951-1	BEZNET ASSY		12	* 4-054-837-01	HOLDER, MIRROR	
5	4-063-365-11	SCREEN, CONTRAST		13	4-063-153-01	MIRROR (41)	
6	4-070-236-11	PLATE (L), DUFFUSION		14	* 4-062-540-01	COVER, MIRROR	
7	4-070-358-11	PLATE (F), DUFFUSION		15	4-378-522-31	SCREW, TAPPING, HEXAGON HEAD	
8	* 4-063-168-01	HOLDER (V), SCREEN		16	* 4-063-177-01	BOARD (41), REAR	

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

7-2. CABINET AND PANEL BLOCK

▲ : +BVTP 3X12 7-685-648-79
○ : +BVTP 4X16 7-685-663-71
● : +BVTP 4X16 7-685-663-79

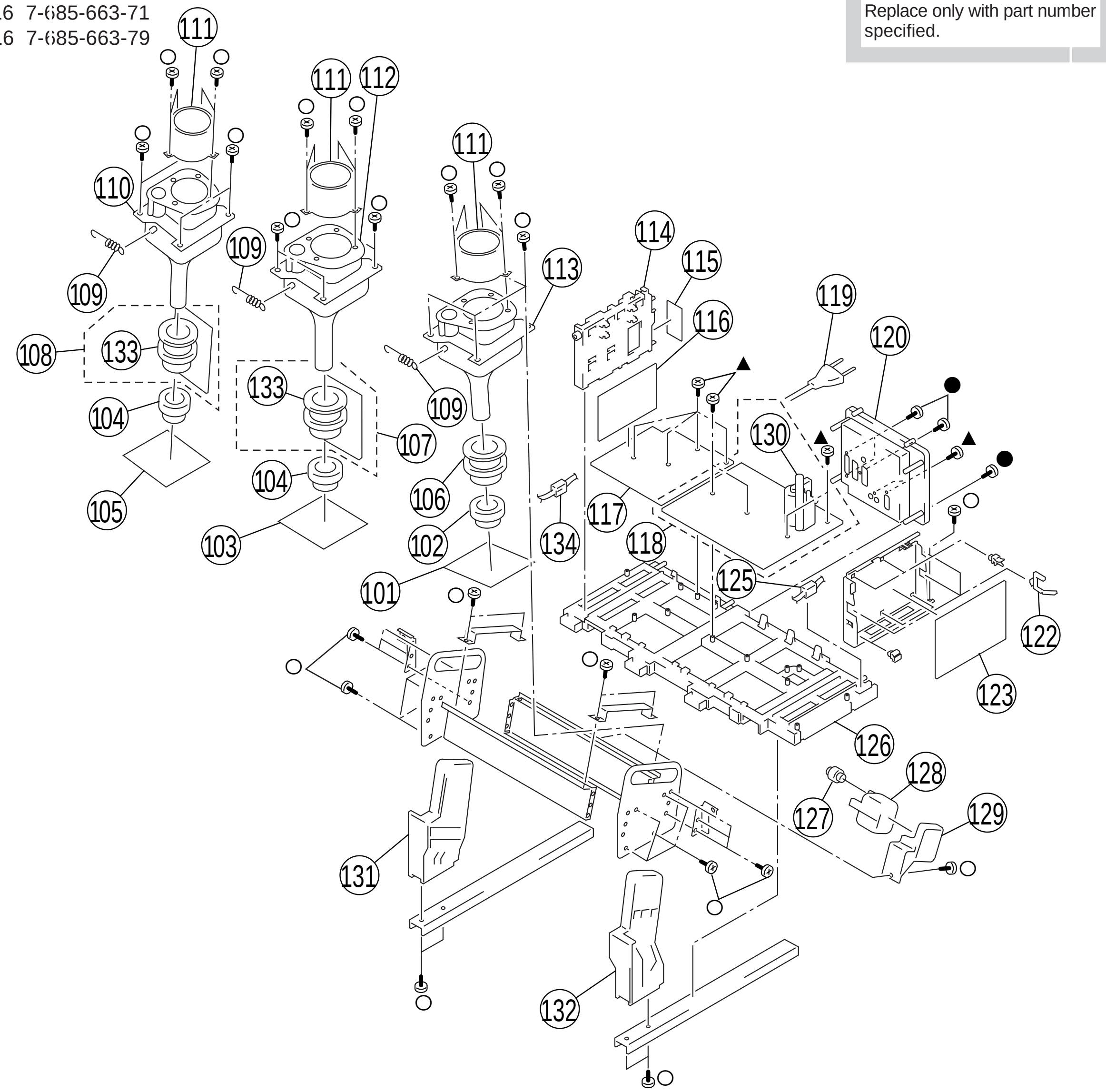


REF.NO.	PART NO.	DESCRIPTION	REMARK
51	4-378-522-31	SCREW, TAPPING, HEXAGON HEAD	
52	X-4036-952-1	PANEL ASSY, CONTROL	53-61
53	4-063-172-21	DOOR	
54	4-843-806-00	STRIKE	
55	3-703-035-11	SHAFT, LID	
56	4-047-464-01	CATCHER, PUSH	
57	4-063-164-01	GUIDE, LIGHT	
58	4-063-170-11	BUTTON, MULTI	
59	4-202-964-01	SPRING	
60	4-063-165-11	BUTTON, POWER	
61	4-045-250-21	DAMPER	
62	⚠ 1-223-925-11	RESISTOR ASSY (HIGH-VOLTAGE)	
63	X-4036-954-1	CABINET ASSY, FRONT	54, 70
64	4-062-539-01	CABINET (REAR)	
65	* 4-062-543-01	BOARD (R), BAFFLE	
66	* A-1372-413-A	H1 BOARD, COMPLETE	
67	* 4-063-174-01	BRACKET (H)	
68	* A-1375-171-A	H2 BOARD, COMPLETE	
69	* 4-062-542-01	BOARD (L), BAFFLE	
70	* 4-063-151-01	SPACER (SP)	
71	1-543-653-11	CORE ASSY, BEAD (DIVISION TYPE)	

7-3. CHASSIS AND PICTURE TUBE

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

▲ : +BVTP 3X12 7-685-648-79
○ : +BVTP 4X16 7-685-663-71
● : +BVTP 4X16 7-685-663-79



REF.NO.	PART NO.	DESCRIPTION	REMARK
101	* A-1331-736-A	CB BOARD, COMPLETE	
102	1-452-909-31	MAGNET ASSY, 4 POLE	
103	* A-1331-735-A	CG BOARD, COMPLETE	
104	⚠ 1-452-790-11	NECK ASSY (NA-295)	
105	* A-1331-734-A	CR BOARD, COMPLETE	
106	⚠ 1-451-455-21	DEFLECTION YOKE (B)	
107	* A-1390-785-A	ZG BOARD, COMPLETE	133
108	* A-1390-784-A	ZR BOARD, COMPLETE	133
109	4-048-142-11	SPRING, EXTENSION	
110	⚠ A-1501-259-A	MECHASEAL ASSY (R), SLANT	
111	4-056-258-01	LENS (DELTA 78)	
112	⚠ A-1501-260-A	MECHASEAL ASSY (G), SLANT	
113	⚠ A-1501-261-A	MECHASEAL ASSY (B), SLANT	
114	* 4-062-536-01	BRACKET (A)	
115	* A-1373-658-A	UE BOARD, COMPLETE	
116	* A-1298-318-A	E BOARD, COMPLETE (KP-41S5/41S5U/41S5B)	
116	* A-1298-455-A	AE BOARD, COMPLETE (KP-41S5G)	
116	* A-1298-456-A	AE BOARD, COMPLETE (KP-41S5K)	
116	* A-1298-457-A	AE BOARD, COMPLETE (KP-41S5R)	
117	* A-1346-678-A	D BOARD, COMPLETE	
118	* A-1346-679-A	E BOARD, COMPLETE	130
119	⚠ 1-765-286-11	CORD, POWER (EXCEPT KP-41S5U)	
119	⚠ 1-776-860-11	CORD, POWER (KP-41S5U)	
120	4-063-178-01	BOARD (EURO), TERMINAL	
122	* 4-316-015-00	HOLDER, WIRE	
123	* A-1316-355-A	G BOARD, COMPLETE	
125	4-389-201-11	HOLDER, AC CORD	
126	* 4-062-537-01	BRACKET, MAIN	
127	4-373-137-01	CAP (Z), RUBBER	
128	⚠ 8-598-955-12	BLOCK ASSY, HIGH-VOLTAGE	
129	* 4-063-176-01	HOLDER, HVR	
130	⚠ 1-453-248-21	FBT ASSY(NX-4007//X4T4)	
131	* 4-062-544-01	STAY (L), SIDE	
132	* 4-062-545-01	STAY (R), SIDE	
133	⚠ 1-451-455-11	DEFLECTION YOKE (R, G)	
134	1-543-653-11	CORE ASSY, BEAD (DIVISION TYPE)	

SECTION 8
ELECTRICAL PARTS LIST

AE

NOTE:

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

- The components identified by ⧓ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

- CAPACITORS
  PF : μμ F
- There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

REF.NO.	PART NO.	DESCRIPTION			REMARK
	* A-1298-318-A	AE BOARD, COMPLETE (KP-41S5/41S5B/41S5U)			
		******************************			
	* A-1298-455-A	AE BOARD, COMPLETE (KP-41S5G)			
		******************************			
	* A-1298-456-A	AE BOARD, COMPLETE (KP-41S5K)			
		******************************			
	* A-1298-457-A	AE BOARD, COMPLETE (KP-41S5R)			
		******************************			
	1-750-797-11	SOCKET, PLCC			
		<CAPACITOR>			
C1	1-163-038-00	CERAMIC CHIP	0.1μF		25V
C2	1-104-664-11	ELECT	47μF	20%	16V
C3	1-163-239-11	CERAMIC CHIP	33pF	5%	50V
C4	1-163-239-11	CERAMIC CHIP	33pF	5%	50V
C8	1-163-038-00	CERAMIC CHIP	0.1μF		25V
C10	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C11	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C14	1-163-038-00	CERAMIC CHIP	0.1μF		25V
C15	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C18	1-163-038-00	CERAMIC CHIP	0.1μF		25V
C19	1-163-017-00	CERAMIC CHIP	0.0047μF	10%	50V
C20	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V
C21	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V
C22	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C24	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C25	1-104-664-11	ELECT	47μF	20%	16V
C26	1-104-664-11	ELECT	47μF	20%	16V
C43	1-163-121-00	CERAMIC CHIP	150pF	5%	50V
C45	1-163-038-00	CERAMIC CHIP	0.1μF		25V
C90	1-163-038-00	CERAMIC CHIP	0.1μF		25V
C101	1-163-038-00	CERAMIC CHIP	0.1μF		25V
C102	1-126-934-11	ELECT	220μF	20%	16V
C103	1-126-965-11	ELECT	22μF	20%	50V
C104	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C110	1-104-664-11	ELECT	47μF	20%	16V
C112	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C113	1-104-664-11	ELECT	47μF	20%	16V
C115	1-163-263-11	CERAMIC CHIP	330pF	5%	50V
C120	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C121	1-163-113-00	CERAMIC CHIP	68pF	5%	50V
C122	1-163-137-00	CERAMIC CHIP	680pF	5%	50V
C123	1-163-113-00	CERAMIC CHIP	68pF	5%	50V
C124	1-163-038-00	CERAMIC CHIP	0.1μF		25V
C125	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V
C126	1-126-933-11	ELECT	100μF	20%	16V
C127	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V
C128	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V
C129	1-163-089-00	CERAMIC CHIP	6pF	0.5pF	50V
C130	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V
C131	1-104-664-11	ELECT	47μF	20%	16V
C132	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V
C133	1-126-963-11	ELECT	4.7μF	20%	50V
C134	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V
C135	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V
C136	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V
C137	1-104-664-11	ELECT	47μF	20%	16V
C138	1-126-964-11	ELECT	10μF	20%	50V
C139	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V
C143	1-104-664-11	ELECT	47μF	20%	16V
C144	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V
C145	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V
C146	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V
C147	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V
C148	1-126-933-11	ELECT	100μF	20%	16V
C149	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V
C150	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V
C151	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V
C152	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
C153	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
C154	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V
C155	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V
C201	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
C202	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V
C203	1-104-661-91	ELECT	330μF	20%	16V
C204	1-163-038-00	CERAMIC CHIP	0.1μF		25V
C205	1-126-965-11	ELECT	22μF	20%	50V
C206	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C207	1-126-964-11	ELECT	10μF	20%	50V
C208	1-126-965-11	ELECT	22μF	20%	50V
C209	1-126-964-11	ELECT	10μF	20%	50V
C210	1-216-295-00	SHORT	0		
C211	1-126-965-11	ELECT	22μF	20%	50V
C212	1-164-346-11	CERAMIC CHIP	1μF		16V

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REF.NO.	PART NO.	DESCRIPTION			REMARK
C213	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C214	1-164-346-11	CERAMIC CHIP	1µF		16V
C215	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C216	1-104-664-11	ELECT	47µF	20%	16V
C217	1-164-232-11	CERAMIC CHIP	0.01µF	10%	50V
C218	1-104-664-11	ELECT	47µF	20%	16V
C219	1-164-232-11	CERAMIC CHIP	0.01µF	10%	50V
C220	1-126-965-11	ELECT	22µF	20%	50V
C221	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C222	1-164-346-11	CERAMIC CHIP	1µF		16V
C223	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C224	1-164-346-11	CERAMIC CHIP	1µF		16V
C225	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C226	1-104-664-11	ELECT	47µF	20%	16V
C227	1-164-232-11	CERAMIC CHIP	0.01µF	10%	50V
C228	1-104-664-11	ELECT	47µF	20%	16V
C229	1-164-232-11	CERAMIC CHIP	0.01µF	10%	50V
C230	1-216-295-00	SHORT	0		
C242	1-164-232-11	CERAMIC CHIP	0.01µF	10%	50V
C243	1-126-967-11	ELECT	47µF	20%	50V
C244	1-164-232-11	CERAMIC CHIP	0.01µF	10%	50V
C245	1-164-232-11	CERAMIC CHIP	0.01µF	10%	50V
C251	1-163-087-00	CERAMIC CHIP	4pF	0.25pF	50V
C252	1-163-087-00	CERAMIC CHIP	4pF	0.25pF	50V
C253	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C254	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C255	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C256	1-163-038-00	CERAMIC CHIP	0.1µF		25V
C257	1-126-965-11	ELECT	22µF	20%	50V
C258	1-126-964-11	ELECT	10µF	20%	50V
C259	1-164-005-11	CERAMIC CHIP	0.47µF		25V
C260	1-163-038-00	CERAMIC CHIP	0.1µF		25V
C261	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C262	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C263	1-163-038-00	CERAMIC CHIP	0.1µF		25V
C264	1-126-962-11	ELECT	3.3µF	20%	50V
C265	1-126-964-11	ELECT	10µF	20%	50V
C266	1-126-964-11	ELECT	10µF	20%	50V
C267	1-126-965-11	ELECT	22µF	20%	50V
C268	1-163-038-00	CERAMIC CHIP	0.1µF		25V
C269	1-163-131-00	CERAMIC CHIP	390pF	5%	50V
C270	1-163-131-00	CERAMIC CHIP	390pF	5%	50V
C271	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C272	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C273	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C274	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C275	1-164-346-11	CERAMIC CHIP	1µF		16V
C276	1-164-346-11	CERAMIC CHIP	1µF		16V
C277	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C278	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C279	1-126-965-11	ELECT	22µF	20%	50V
C280	1-163-038-00	CERAMIC CHIP	0.1µF		25V
C281	1-126-965-11	ELECT	22µF	20%	50V
C282	1-163-038-00	CERAMIC CHIP	0.1µF		25V
C283	1-164-232-11	CERAMIC CHIP	0.01µF	10%	50V
C300	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C301	1-163-038-00	CERAMIC CHIP	0.1µF		25V

REF.NO.	PART NO.	DESCRIPTION			REMARK
C302	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C303	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C304	1-163-038-00	CERAMIC CHIP	0.1µF		25V
C305	1-163-038-00	CERAMIC CHIP	0.1µF		25V
C306	1-164-232-11	CERAMIC CHIP	0.01µF	10%	50V
C307	1-164-232-11	CERAMIC CHIP	0.01µF	10%	50V
C308	1-164-232-11	CERAMIC CHIP	0.01µF	10%	50V
C309	1-164-346-11	CERAMIC CHIP	1µF		16V
C310	1-164-346-11	CERAMIC CHIP	1µF		16V
C311	1-164-346-11	CERAMIC CHIP	1µF		16V
C312	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C313	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C315	1-216-295-00	SHORT	0		
C316	1-163-239-11	CERAMIC CHIP	33pF	5%	50V
C317	1-163-038-00	CERAMIC CHIP	0.1µF		25V
C320	1-126-965-11	ELECT	22µF	20%	50V
C321	1-164-232-11	CERAMIC CHIP	0.01µF	10%	50V
C322	1-163-038-00	CERAMIC CHIP	0.1µF		25V
C323	1-163-038-00	CERAMIC CHIP	0.1µF		25V
C324	1-163-038-00	CERAMIC CHIP	0.1µF		25V
C325	1-164-346-11	CERAMIC CHIP	1µF		16V
C326	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C327	1-137-374-11	FILM	0.047µF	5%	50V
C328	1-126-964-11	ELECT	10µF	20%	50V
C330	1-130-777-00	FILM	0.1µF	5%	63V
C331	1-137-581-11	FILM	0.1µF	5%	100V
C332	1-164-232-11	CERAMIC CHIP	0.01µF	10%	50V
C333	1-126-933-11	ELECT	100µF	20%	16V
C334	1-164-232-11	CERAMIC CHIP	0.01µF	10%	50V
C335	1-164-005-11	CERAMIC CHIP	0.47µF		25V
C336	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C337	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C338	1-126-962-11	ELECT	3.3µF	20%	50V
C339	1-164-232-11	CERAMIC CHIP	0.01µF	10%	50V
C340	1-126-933-11	ELECT	100µF	20%	16V
C341	1-164-005-11	CERAMIC CHIP	0.47µF		25V
C342	1-164-346-11	CERAMIC CHIP	1µF		16V
C343	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C344	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C347	1-126-963-11	ELECT	4.7µF	20%	50V
C348	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C350	1-126-964-11	ELECT	10µF	20%	50V
C351	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C352	1-164-005-11	CERAMIC CHIP	0.47µF		25V
C353	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C354	1-164-005-11	CERAMIC CHIP	0.47µF		25V
C355	1-126-965-11	ELECT	22µF	20%	50V
C356	1-164-232-11	CERAMIC CHIP	0.01µF	10%	50V
C357	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C358	1-164-005-11	CERAMIC CHIP	0.47µF		25V
C359	1-163-231-11	CERAMIC CHIP	15pF	5%	50V
C360	1-163-231-11	CERAMIC CHIP	15pF	5%	50V
C370	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C371	1-163-275-11	CERAMIC CHIP	1000pF	5%	50V
C372	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C373	1-164-489-11	CERAMIC CHIP	0.22µF	10%	16V

REF.NO.	PART NO.	DESCRIPTION	REMARK
C376	1-163-251-11	CERAMIC CHIP 100pF 5% 50V	
C377	1-126-964-11	ELECT 10µF 20% 50V	
C380	1-163-038-00	CERAMIC CHIP 0.1µF 25V	
C1001	1-163-235-11	CERAMIC CHIP 22pF 5% 50V	
C1002	1-163-235-11	CERAMIC CHIP 22pF 5% 50V	
C1010	1-163-038-00	CERAMIC CHIP 0.1µF 25V	
C1013	1-126-965-11	ELECT 22µF 20% 50V	
C1014	1-163-038-00	CERAMIC CHIP 0.1µF 25V	
C1015	1-164-489-11	CERAMIC CHIP 0.22µF 10% 16V	
C1020	1-163-235-11	CERAMIC CHIP 22pF 5% 50V	
		<FILTER>	
CF120	1-409-327-00	TRAP, CERAMIC (6.5MHZ)	
		<CONNECTOR>	
CN1	1-695-302-11	CONNECTOR, BOARD TO BOARD 50P	
CN2	*1-564-508-11	PLUG, CONNECTOR 5P	
CN6	*1-564-516-11	PLUG, CONNECTOR 13P	
CN101	1-695-915-11	TAB (CONTACT)	
CN201	1-766-296-11	CONNECTOR, DUAL SCART	
CN301	*1-564-510-11	PLUG, CONNECTOR 7P	
		<DIODE>	
D2	8-719-988-61	DIODE 1SS355TE-17	
D10	8-719-158-15	DIODE RD5.6SB	
D11	8-719-158-15	DIODE RD5.6SB	
D12	8-719-158-15	DIODE RD5.6SB	
D16	8-719-988-61	DIODE 1SS355TE-17	
D101	8-719-977-81	DIODE DTZ33B	
D102	8-719-988-61	DIODE 1SS355TE-17	
D201	8-719-977-22	DIODE DTZ9.1	
D202	8-719-977-22	DIODE DTZ9.1	
D203	8-719-977-22	DIODE DTZ9.1	
D204	8-719-977-22	DIODE DTZ9.1	
D205	8-719-977-22	DIODE DTZ9.1	
D206	8-719-977-22	DIODE DTZ9.1	
D207	8-719-977-22	DIODE DTZ9.1	
D208	8-719-977-22	DIODE DTZ9.1	
D209	8-719-977-22	DIODE DTZ9.1	
D210	8-719-977-22	DIODE DTZ9.1	
D211	8-719-977-22	DIODE DTZ9.1	
D212	8-719-977-22	DIODE DTZ9.1	
D213	8-719-977-22	DIODE DTZ9.1	
D214	8-719-977-22	DIODE DTZ9.1	
D215	8-719-977-22	DIODE DTZ9.1	
D216	8-719-158-15	DIODE RD5.6SB	
D217	8-719-158-15	DIODE RD5.6SB	
D218	8-719-158-15	DIODE RD5.6SB	
D220	8-719-988-61	DIODE 1SS355TE-17	
D221	8-719-988-61	DIODE 1SS355TE-17	
D222	8-719-977-22	DIODE DTZ9.1	
D223	8-719-977-22	DIODE DTZ9.1	
D224	8-719-977-22	DIODE DTZ9.1	

REF.NO.	PART NO.	DESCRIPTION	REMARK
D225	8-719-977-22	DIODE DTZ9.1	
D226	8-719-977-22	DIODE DTZ9.1	
D227	8-719-056-83	DIODE UDZ-TE-17-6.8B	
D228	8-719-977-12	DIODE DTZ6.8B	
D231	8-719-158-15	DIODE RD5.6SB	
D251	8-719-047-16	DIODE BAS216	
D303	8-719-988-61	DIODE 1SS355TE-17	
D304	8-719-988-61	DIODE 1SS355TE-17	
D320	8-719-977-22	DIODE DTZ9.1	
D370	8-719-047-16	DIODE BAS216	
D1010	8-719-036-58	DIODE MA3030-H(TX)	
		<FERRITE BEAD>	
FB101	1-414-235-11	INDUCTOR CHIP 0µH	
FB102	1-414-235-11	INDUCTOR CHIP 0µH	
FB103	1-414-235-11	INDUCTOR CHIP 0µH	
FB104	1-414-235-11	INDUCTOR CHIP 0µH	
		<FILTER>	
FL101	1-236-071-11	ENCAPSULATED COMPONENT	
FL102	1-233-765-21	FILTER	
FL103	1-233-765-21	FILTER	
FL104	1-233-765-21	FILTER	
FL201	1-236-071-11	ENCAPSULATED COMPONENT	
FL202	1-236-071-11	ENCAPSULATED COMPONENT	
FL203	1-236-071-11	ENCAPSULATED COMPONENT	
FL1001	1-236-071-11	ENCAPSULATED COMPONENT	
		<IC>	
IC1	8-759-376-77	IC SDA30C263-GEG	
IC2	8-759-524-94	IC M24C32-MW6T	
IC3	8-759-581-32	IC M27C2001-12C1RE402 (KP-41S5K)	
IC3	8-759-581-33	IC M27C2001-12C1RG402 (KP-41S5G)	
IC3	8-759-581-34	IC M27C2001-12C1RR402 (KP-41S5R)	
IC3	8-759-581-35	IC M27C2001-12C1RW402 (KP-41S5/41S5B/41S5U)	
IC4	8-759-394-57	IC PST593C-MMP-4P	
IC102	8-759-711-62	IC NJM2240M	
IC103	8-752-379-35	IC CXD2044Q-TL	
IC201	8-752-081-26	IC CXA2040AQ-T4	
IC202	8-759-491-95	IC MSP3410D-PS-B4-T-ND	
IC204	8-759-008-67	IC MC14066BF	
IC205	8-759-394-57	IC PST593C-MMP-4P	
IC206	8-752-058-68	IC CXA1315M	
IC301	8-752-081-43	IC CXA2076Q-TL	
IC302	8-759-565-20	IC TDA4665T/V5-118	
IC303	8-759-430-79	IC TDA8395T/N3	
IC1001	8-759-584-20	IC SDA5273-3CP	
		<CHIP, CONDUCTOR>	
JR1	1-216-295-00	SHORT 0	
JR2	1-216-296-00	SHORT 0	
JR3	1-216-296-00	SHORT 0	
JR4	1-216-295-00	SHORT 0	

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REF.NO.	PART NO.	DESCRIPTION	REMARK
JR201	1-216-295-00	SHORT 0	
JR203	1-216-295-00	SHORT 0	
JR208	1-216-295-00	SHORT 0	
JR209	1-216-295-00	SHORT 0	
JR211	1-216-295-00	SHORT 0	
JR212	1-216-295-00	SHORT 0	
JR303	1-216-296-00	SHORT 0	
JR304	1-216-296-00	SHORT 0	
JR305	1-216-296-00	SHORT 0	
JR360	1-216-295-00	SHORT 0	
JR362	1-216-295-00	SHORT 0	
JR1010	1-216-295-00	SHORT 0	
	<COIL>		
L10	1-410-379-31	INDUCTOR CHIP	6.8µH
L102	1-408-600-31	INDUCTOR	5.6µH
L111	1-216-295-00	SHORT 0	
L120	1-408-602-31	INDUCTOR	8.2µH
L121	1-408-591-11	INDUCTOR	1µH
L122	1-408-602-31	INDUCTOR	8.2µH
L300	1-412-006-31	INDUCTOR CHIP	10µH
L301	1-410-993-11	INDUCTOR CHIP	1µH
	<TRANSISTOR>		
Q1	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q4	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q15	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q17	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q18	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q20	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q21	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q22	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q23	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q24	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q25	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q101	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q102	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q103	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q104	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q105	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q106	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q107	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q108	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q109	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q110	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q111	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q112	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q113	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q114	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q115	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q116	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q120	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q121	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q122	8-729-120-28	TRANSISTOR 2SC1623-L5L6	

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q124	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q125	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q130	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q201	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q202	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q203	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q204	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q211	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q212	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q213	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q214	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q215	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q216	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q217	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q300	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q301	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q302	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q303	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q304	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q305	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q306	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q307	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q308	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q309	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q330	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q331	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1001	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1002	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
	<RESISTOR>		
R1	1-216-049-00	RES,CHIP 1K 5% 1/10W	
R2	1-216-025-00	RES,CHIP 100 5% 1/10W	
R3	1-216-025-00	RES,CHIP 100 5% 1/10W	
R4	1-216-013-00	RES,CHIP 33 5% 1/10W	
R5	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R6	1-216-667-11	METAL CHIP 4.7K 0.50% 1/10W	
R7	1-216-041-00	RES,CHIP 470 5% 1/10W	
R9	1-216-041-00	RES,CHIP 470 5% 1/10W	
R18	1-216-025-00	RES,CHIP 100 5% 1/10W	
R19	1-216-025-00	RES,CHIP 100 5% 1/10W	
R20	1-216-025-00	RES,CHIP 100 5% 1/10W	
R21	1-216-025-00	RES,CHIP 100 5% 1/10W	
R24	1-216-065-00	RES,CHIP 4.7K 5% 1/10W	
R25	1-216-065-00	RES,CHIP 4.7K 5% 1/10W	
R28	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R29	1-216-065-00	RES,CHIP 4.7K 5% 1/10W	
R30	1-216-065-00	RES,CHIP 4.7K 5% 1/10W	
R31	1-216-065-00	RES,CHIP 4.7K 5% 1/10W	
R32	1-216-025-00	RES,CHIP 100 5% 1/10W	
R33	1-216-025-00	RES,CHIP 100 5% 1/10W	
R34	1-216-025-00	RES,CHIP 100 5% 1/10W	
R35	1-216-025-00	RES,CHIP 100 5% 1/10W	
R40	1-216-067-00	RES,CHIP 5.6K 5% 1/10W	
R42	1-216-069-00	RES,CHIP 6.8K 5% 1/10W	
R44	1-216-069-00	RES,CHIP 6.8K 5% 1/10W	
R46	1-216-095-00	RES,CHIP 82K 5% 1/10W	

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REF.NO.	PART NO.	DESCRIPTION				REMARK
R47	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
R48	1-217-671-11	RES,CHIP	1	5%	1/10W	
R49	1-216-025-00	RES,CHIP	100	5%	1/10W	
R50	1-216-065-00	RES,CHIP	4.7K	5%	1/10W	
R51	1-216-059-00	RES,CHIP	2.7K	5%	1/10W	
R52	1-216-065-00	RES,CHIP	4.7K	5%	1/10W	
R53	1-216-059-00	RES,CHIP	2.7K	5%	1/10W	
R54	1-216-025-00	RES,CHIP	100	5%	1/10W	
R58	1-216-063-91	RES,CHIP	3.9K	5%	1/10W	
R59	1-216-025-00	RES,CHIP	100	5%	1/10W	
R60	1-216-025-00	RES,CHIP	100	5%	1/10W	
R61	1-216-025-00	RES,CHIP	100	5%	1/10W	
R62	1-216-025-00	RES,CHIP	100	5%	1/10W	
R64	1-216-025-00	RES,CHIP	100	5%	1/10W	
R65	1-216-025-00	RES,CHIP	100	5%	1/10W	
R66	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
R67	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
R68	1-216-025-00	RES,CHIP	100	5%	1/10W	
R70	1-216-025-00	RES,CHIP	100	5%	1/10W	
R71	1-216-025-00	RES,CHIP	100	5%	1/10W	
R72	1-216-025-00	RES,CHIP	100	5%	1/10W	
R73	1-216-025-00	RES,CHIP	100	5%	1/10W	
R74	1-216-025-00	RES,CHIP	100	5%	1/10W	
R76	1-216-025-00	RES,CHIP	100	5%	1/10W	
R77	1-216-025-00	RES,CHIP	100	5%	1/10W	
R78	1-216-025-00	RES,CHIP	100	5%	1/10W	
R79	1-216-033-00	RES,CHIP	220	5%	1/10W	
R88	1-216-025-00	RES,CHIP	100	5%	1/10W	
R91	1-216-025-00	RES,CHIP	100	5%	1/10W	
R92	1-216-025-00	RES,CHIP	100	5%	1/10W	
R93	1-216-033-00	RES,CHIP	220	5%	1/10W	
R94	1-216-033-00	RES,CHIP	220	5%	1/10W	
R95	1-216-033-00	RES,CHIP	220	5%	1/10W	
R97	1-216-025-00	RES,CHIP	100	5%	1/10W	
R101	1-216-061-00	RES,CHIP	3.3K	5%	1/10W	
R102	1-216-025-00	RES,CHIP	100	5%	1/10W	
R103	1-216-025-00	RES,CHIP	100	5%	1/10W	
R104	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R105	1-216-113-00	RES,CHIP	470K	5%	1/10W	
R106	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R107	1-216-295-00	SHORT	0			
R110	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R111	1-216-029-00	RES,CHIP	150	5%	1/10W	
R112	1-216-029-00	RES,CHIP	150	5%	1/10W	
R113	1-216-001-00	RES,CHIP	10	5%	1/10W	
R114	1-216-029-00	RES,CHIP	150	5%	1/10W	
R115	1-216-037-00	RES,CHIP	330	5%	1/10W	
R116	1-216-065-00	RES,CHIP	4.7K	5%	1/10W	
R117	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
R118	1-216-071-00	RES,CHIP	8.2K	5%	1/10W	
R119	1-216-033-00	RES,CHIP	220	5%	1/10W	
R120	1-216-069-00	RES,CHIP	6.8K	5%	1/10W	
R121	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R122	1-216-041-00	RES,CHIP	470	5%	1/10W	
R123	1-216-031-00	RES,CHIP	180	5%	1/10W	
R124	1-216-049-00	RES,CHIP	1K	5%	1/10W	
R125	1-216-081-00	RES,CHIP	22K	5%	1/10W	
R126	1-216-025-00	RES,CHIP	100	5%	1/10W	
R127	1-216-081-00	RES,CHIP	22K	5%	1/10W	
R128	1-216-035-00	RES,CHIP	270	5%	1/10W	
R129	1-216-037-00	RES,CHIP	330	5%	1/10W	
R130	1-216-061-00	RES,CHIP	3.3K	5%	1/10W	
R131	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R132	1-216-025-00	RES,CHIP	100	5%	1/10W	
R133	1-216-041-00	RES,CHIP	470	5%	1/10W	
R134	1-216-001-00	RES,CHIP	10	5%	1/10W	
R135	1-216-045-00	RES,CHIP	680	5%	1/10W	
R136	1-216-033-00	RES,CHIP	220	5%	1/10W	
R137	1-216-049-00	RES,CHIP	1K	5%	1/10W	
R138	1-216-041-00	RES,CHIP	470	5%	1/10W	
R142	1-216-295-00	SHORT	0			
R143	1-216-295-00	SHORT	0			
R145	1-216-025-00	RES,CHIP	100	5%	1/10W	
R146	1-216-025-00	RES,CHIP	100	5%	1/10W	
R147	1-216-025-00	RES,CHIP	100	5%	1/10W	
R148	1-216-025-00	RES,CHIP	100	5%	1/10W	
R149	1-216-025-00	RES,CHIP	100	5%	1/10W	
R150	1-216-025-00	RES,CHIP	100	5%	1/10W	
R151	1-216-025-00	RES,CHIP	100	5%	1/10W	
R153	1-216-025-00	RES,CHIP	100	5%	1/10W	
R154	1-216-295-00	SHORT	0			
R156	1-216-089-00	RES,CHIP	47K	5%	1/10W	
R157	1-216-089-00	RES,CHIP	47K	5%	1/10W	
R158	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R159	1-216-049-00	RES,CHIP	1K	5%	1/10W	
R160	1-216-061-00	RES,CHIP	3.3K	5%	1/10W	
R161	1-216-033-00	RES,CHIP	220	5%	1/10W	
R162	1-216-109-00	RES,CHIP	330K	5%	1/10W	
R163	1-216-033-00	RES,CHIP	220	5%	1/10W	
R164	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R165	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R166	1-216-033-00	RES,CHIP	220	5%	1/10W	
R167	1-216-043-91	RES,CHIP	560	5%	1/10W	
R168	1-216-067-00	RES,CHIP	5.6K	5%	1/10W	
R169	1-216-049-00	RES,CHIP	1K	5%	1/10W	
R170	1-216-025-00	RES,CHIP	100	5%	1/10W	
R171	1-216-097-00	RES,CHIP	100K	5%	1/10W	
R172	1-216-065-00	RES,CHIP	4.7K	5%	1/10W	
R173	1-216-025-00	RES,CHIP	100	5%	1/10W	
R174	1-216-666-11	METAL CHIP	4.3K	0.50%	1/10W	
R175	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W	
R176	1-216-295-00	SHORT	0			
R177	1-216-049-00	RES,CHIP	1K	5%	1/10W	
R178	1-216-295-00	SHORT	0			
R179	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W	
R180	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W	
R181	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	
R182	1-216-635-11	METAL CHIP	220	0.50%	1/10W	
R183	1-216-635-11	METAL CHIP	220	0.50%	1/10W	
R184	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
R185	1-216-043-91	RES,CHIP	560	5%	1/10W	
R186	1-216-067-00	RES,CHIP	5.6K	5%	1/10W	
R187	1-216-049-00	RES,CHIP	1K	5%	1/10W	
R188	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	

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REF.NO.	PART NO.	DESCRIPTION				REMARK
R189	1-216-043-91	RES,CHIP	560	5%	1/10W	
R190	1-216-067-00	RES,CHIP	5.6K	5%	1/10W	
R191	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
R192	1-216-049-00	RES,CHIP	1K	5%	1/10W	
R193	1-216-049-00	RES,CHIP	1K	5%	1/10W	
R194	1-216-049-00	RES,CHIP	1K	5%	1/10W	
R195	1-216-049-00	RES,CHIP	1K	5%	1/10W	
R196	1-216-049-00	RES,CHIP	1K	5%	1/10W	
R197	1-216-049-00	RES,CHIP	1K	5%	1/10W	
R198	1-216-033-00	RES,CHIP	220	5%	1/10W	
R199	1-216-033-00	RES,CHIP	220	5%	1/10W	
R200	1-216-049-00	RES,CHIP	1K	5%	1/10W	
R201	1-216-033-00	RES,CHIP	220	5%	1/10W	
R202	1-216-033-00	RES,CHIP	220	5%	1/10W	
R203	1-216-025-00	RES,CHIP	100	5%	1/10W	
R204	1-216-025-00	RES,CHIP	100	5%	1/10W	
R205	1-216-689-11	RES,CHIP	39K	5%	1/10W	
R206	1-216-033-00	RES,CHIP	220	5%	1/10W	
R207	1-216-089-00	RES,CHIP	47K	5%	1/10W	
R208	1-216-041-00	RES,CHIP	470	5%	1/10W	
R209	1-216-049-00	RES,CHIP	1K	5%	1/10W	
R210	1-216-017-00	RES,CHIP	47	5%	1/10W	
R211	1-216-033-00	RES,CHIP	220	5%	1/10W	
R212	1-216-022-00	RES,CHIP	75	5%	1/10W	
R213	1-216-022-00	RES,CHIP	75	5%	1/10W	
R214	1-216-025-00	RES,CHIP	100	5%	1/10W	
R216	1-216-025-00	RES,CHIP	100	5%	1/10W	
R217	1-216-113-00	RES,CHIP	470K	5%	1/10W	
R218	1-216-025-00	RES,CHIP	100	5%	1/10W	
R219	1-216-113-00	RES,CHIP	470K	5%	1/10W	
R220	1-216-295-00	SHORT	0			
R221	1-216-039-00	RES,CHIP	390	5%	1/10W	
R222	1-216-089-00	RES,CHIP	47K	5%	1/10W	
R223	1-216-295-00	SHORT	0			
R224	1-216-039-00	RES,CHIP	390	5%	1/10W	
R225	1-216-089-00	RES,CHIP	47K	5%	1/10W	
R226	1-216-033-00	RES,CHIP	220	5%	1/10W	
R227	1-216-022-00	RES,CHIP	75	5%	1/10W	
R228	1-216-022-00	RES,CHIP	75	5%	1/10W	
R229	1-216-033-00	RES,CHIP	220	5%	1/10W	
R230	1-216-022-00	RES,CHIP	75	5%	1/10W	
R232	1-216-025-00	RES,CHIP	100	5%	1/10W	
R233	1-216-025-00	RES,CHIP	100	5%	1/10W	
R234	1-216-113-00	RES,CHIP	470K	5%	1/10W	
R235	1-216-025-00	RES,CHIP	100	5%	1/10W	
R236	1-216-113-00	RES,CHIP	470K	5%	1/10W	
R237	1-216-295-00	SHORT	0			
R238	1-216-089-00	RES,CHIP	47K	5%	1/10W	
R239	1-216-039-00	RES,CHIP	390	5%	1/10W	
R240	1-216-295-00	SHORT	0			
R241	1-216-089-00	RES,CHIP	47K	5%	1/10W	
R242	1-216-039-00	RES,CHIP	390	5%	1/10W	
R243	1-216-033-00	RES,CHIP	220	5%	1/10W	
R244	1-216-033-00	RES,CHIP	220	5%	1/10W	
R248	1-216-025-00	RES,CHIP	100	5%	1/10W	
R249	1-216-001-00	RES,CHIP	10	5%	1/10W	
R250	1-216-033-00	RES,CHIP	220	5%	1/10W	
R251	1-216-025-00	RES,CHIP	100	5%	1/10W	
R252	1-216-025-00	RES,CHIP	100	5%	1/10W	
R253	1-216-025-00	RES,CHIP	100	5%	1/10W	
R254	1-216-025-00	RES,CHIP	100	5%	1/10W	
R255	1-216-025-00	RES,CHIP	100	5%	1/10W	
R256	1-216-025-00	RES,CHIP	100	5%	1/10W	
R257	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R258	1-216-017-00	RES,CHIP	47	5%	1/10W	
R259	1-216-041-00	RES,CHIP	470	5%	1/10W	
R264	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R265	1-216-065-00	RES,CHIP	4.7K	5%	1/10W	
R266	1-216-081-00	RES,CHIP	22K	5%	1/10W	
R267	1-216-065-00	RES,CHIP	4.7K	5%	1/10W	
R268	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R269	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R270	1-216-022-00	RES,CHIP	75	5%	1/10W	
R271	1-216-022-00	RES,CHIP	75	5%	1/10W	
R272	1-216-022-00	RES,CHIP	75	5%	1/10W	
R273	1-216-022-00	RES,CHIP	75	5%	1/10W	
R274	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R280	1-216-049-00	RES,CHIP	1K	5%	1/10W	
R281	1-216-089-00	RES,CHIP	47K	5%	1/10W	
R282	1-216-093-91	RES,CHIP	68K	5%	1/10W	
R283	1-216-065-00	RES,CHIP	4.7K	5%	1/10W	
R284	1-216-089-00	RES,CHIP	47K	5%	1/10W	
R285	1-216-093-91	RES,CHIP	68K	5%	1/10W	
R286	1-216-065-00	RES,CHIP	4.7K	5%	1/10W	
R291	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
R292	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
R293	1-216-089-00	RES,CHIP	47K	5%	1/10W	
R294	1-216-097-00	RES,CHIP	100K	5%	1/10W	
R295	1-216-049-00	RES,CHIP	1K	5%	1/10W	
R296	1-216-049-00	RES,CHIP	1K	5%	1/10W	
R297	1-216-033-00	RES,CHIP	220	5%	1/10W	
R298	1-216-033-00	RES,CHIP	220	5%	1/10W	
R299	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R300	1-216-025-00	RES,CHIP	100	5%	1/10W	
R301	1-216-033-00	RES,CHIP	220	5%	1/10W	
R302	1-216-295-00	SHORT	0			
R303	1-216-295-00	SHORT	0			
R304	1-216-129-00	RES,CHIP	2.2M	5%	1/10W	
R305	1-216-033-00	RES,CHIP	220	5%	1/10W	
R308	1-216-025-00	RES,CHIP	100	5%	1/10W	
R309	1-216-033-00	RES,CHIP	220	5%	1/10W	
R310	1-216-033-00	RES,CHIP	220	5%	1/10W	
R315	1-216-295-00	SHORT	0			
R316	1-216-033-00	RES,CHIP	220	5%	1/10W	
R320	1-216-025-00	RES,CHIP	100	5%	1/10W	
R321	1-216-025-00	RES,CHIP	100	5%	1/10W	
R322	1-216-025-00	RES,CHIP	100	5%	1/10W	
R323	1-216-033-00	RES,CHIP	220	5%	1/10W	
R325	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R326	1-216-025-00	RES,CHIP	100	5%	1/10W	
R327	1-216-025-00	RES,CHIP	100	5%	1/10W	
R329	1-216-089-00	RES,CHIP	47K	5%	1/10W	
R330	1-216-025-00	RES,CHIP	100	5%	1/10W	

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION			REMARK
R331	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R332	1-216-049-00	RES,CHIP	1K	5%	1/10W
R333	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R334	1-216-041-00	RES,CHIP	470	5%	1/10W
R335	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R336	1-216-109-00	RES,CHIP	330K	5%	1/10W
R337	1-216-025-00	RES,CHIP	100	5%	1/10W
R338	1-216-049-00	RES,CHIP	1K	5%	1/10W
R339	1-216-049-00	RES,CHIP	1K	5%	1/10W
R340	1-216-025-00	RES,CHIP	100	5%	1/10W
R341	1-216-025-00	RES,CHIP	100	5%	1/10W
R342	1-216-049-00	RES,CHIP	1K	5%	1/10W
R343	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R344	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R345	1-216-025-00	RES,CHIP	100	5%	1/10W
R347	1-216-025-00	RES,CHIP	100	5%	1/10W
R348	1-216-025-00	RES,CHIP	100	5%	1/10W
R349	1-216-025-00	RES,CHIP	100	5%	1/10W
R350	1-216-041-00	RES,CHIP	470	5%	1/10W
R351	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R352	1-216-077-91	RES,CHIP	15K	5%	1/10W
R353	1-216-033-00	RES,CHIP	220	5%	1/10W
R354	1-216-295-00	SHORT	0		
R355	1-216-093-91	RES,CHIP	68K	5%	1/10W
R356	1-216-133-00	RES,CHIP	3.3M	5%	1/10W
R357	1-216-049-00	RES,CHIP	1K	5%	1/10W
R358	1-216-105-00	RES,CHIP	220K	5%	1/10W
R359	1-216-295-00	SHORT	0		
R360	1-216-129-00	RES,CHIP	2.2M	5%	1/10W
R361	1-216-129-00	RES,CHIP	2.2M	5%	1/10W
R370	1-216-295-00	SHORT	0		
R371	1-216-033-00	RES,CHIP	220	5%	1/10W
R373	1-216-049-00	RES,CHIP	1K	5%	1/10W
R374	1-216-041-00	RES,CHIP	470	5%	1/10W
R375	1-216-049-00	RES,CHIP	1K	5%	1/10W
R376	1-216-081-00	RES,CHIP	22K	5%	1/10W
R377	1-216-049-00	RES,CHIP	1K	5%	1/10W
R378	1-216-680-00	METAL CHIP	16K	0.50%	1/10W
R379	1-216-041-00	RES,CHIP	470	5%	1/10W
R1001	1-216-025-00	RES,CHIP	100	5%	1/10W
R1002	1-216-025-00	RES,CHIP	100	5%	1/10W
R1010	1-216-295-00	SHORT	0		
R1012	1-216-041-00	RES,CHIP	470	5%	1/10W
R1014	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1017	1-216-295-00	SHORT	0		
R1020	1-216-097-00	RES,CHIP	100K	5%	1/10W
R1021	1-216-029-00	RES,CHIP	150	5%	1/10W
R1022	1-216-029-00	RES,CHIP	150	5%	1/10W
R1023	1-216-029-00	RES,CHIP	150	5%	1/10W
R1024	1-216-045-00	RES,CHIP	680	5%	1/10W
R1026	1-216-025-00	RES,CHIP	100	5%	1/10W
R1027	1-216-025-00	RES,CHIP	100	5%	1/10W
R1028	1-216-025-00	RES,CHIP	100	5%	1/10W

<TUNER>

REF.NO.	PART NO.	DESCRIPTION
TU101	1-693-340-11	TUNER/VIF

<CRYSTAL>

REF.NO.	PART NO.	DESCRIPTION
X1	1-767-154-21	VIBRATOR, CERAMIC (11.5MHz)
X201	1-760-628-11	VIBRATOR, CRYSTAL (18.432MHz)
X301	1-567-504-11	OSCILLATOR, CRYSTAL (4.43MHz)
X302	1-567-505-11	OSCILLATOR, CRYSTAL (3.58MHz)
X303	1-767-127-11	VIBRATOR, CERAMIC (500kHz)
X1001	1-579-965-21	VIBRATOR, CRYSTAL (20.48MHz)

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* A-1316-355-A G BOARD, COMPLETE
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4-382-854-11 SCREW (M3X10), P, SW (+)

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
C6001	1-119-894-51	CERAMIC	2200pF	20%	250V
C6002 ⚠	1-104-706-51	FILM	0.22µF	20%	250V
C6003	1-126-943-11	ELECT	2200µF	20%	25V
C6004	1-104-665-11	ELECT	100µF	20%	25V
C6006 ⚠	1-104-706-51	FILM	0.22µF	20%	250V
C6007	1-119-894-51	CERAMIC	2200pF	20%	250V
C6011	1-107-676-91	ELECT	2.2µF	20%	450V
C6012	1-102-112-00	CERAMIC	330pF	10%	50V
C6018	1-117-753-11	ELECT(BLOCK)	470µF	20%	450V
C6019	1-104-664-11	ELECT	47µF	20%	25V
C6020	1-104-665-11	ELECT	100µF	20%	25V
C6021	1-126-961-11	ELECT	2.2µF	20%	50V
C6026	1-104-665-11	ELECT	100µF	20%	25V
C6030	1-115-405-11	FILM	0.039µF	3%	1KV
C6031	1-126-964-11	ELECT	10µF	20%	50V
C6032	1-126-964-11	ELECT	10µF	20%	50V
C6033	1-136-479-11	FILM	0.001µF	2%	50V
C6034	1-101-810-00	CERAMIC	100pF	5%	500V
C6035	1-101-810-00	CERAMIC	100pF	5%	500V
C6036	1-126-768-11	ELECT	2200µF	20%	16V
C6037	1-126-943-11	ELECT	2200µF	20%	25V
C6038	1-128-548-11	ELECT	4700µF	20%	25V
C6039	1-126-972-11	ELECT	1000µF	20%	50V
C6040	1-126-972-11	ELECT	1000µF	20%	50V
C6041	1-126-960-11	ELECT	1µF	20%	50V
C6042	1-104-665-11	ELECT	100µF	20%	25V
C6044	1-107-641-11	ELECT	220µF	20%	160V
C6045	1-104-665-11	ELECT	100µF	20%	25V
C6046	1-104-665-11	ELECT	100µF	20%	25V
C6047	1-102-112-00	CERAMIC	330pF	10%	50V
C6048	1-126-960-11	ELECT	1µF	20%	50V
C6049	1-136-165-00	FILM	0.1µF	5%	50V
C6050	1-109-954-11	ELECT	0.47µF	20%	160V
C6051	1-126-935-11	ELECT	470µF	20%	6.3V
C6052	1-125-969-91	CERAMIC	680pF	10%	1KV

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The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION			REMARK
C6053	1-125-969-91	CERAMIC	680pF	10%	1KV
C6055	1-107-641-11	ELECT	220µF	20%	160V
C6058	1-102-114-00	CERAMIC	470pF	10%	50V
C6059	1-102-114-00	CERAMIC	470pF	10%	50V
C6060	1-102-114-00	CERAMIC	470pF	10%	50V
C6061	1-102-114-00	CERAMIC	470pF	10%	50V
C6062	1-102-114-00	CERAMIC	470pF	10%	50V
C6063	1-102-114-00	CERAMIC	470pF	10%	50V
C6064 ⚠	1-161-964-91	CERAMIC	0.0047µF		250V
C6065 ⚠	1-161-964-91	CERAMIC	0.0047µF		250V

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN6001	1-695-915-11	TAB (CONTACT)	
CN6002	1-695-915-11	TAB (CONTACT)	
CN6005	*1-580-843-11	PIN, CONNECTOR (POWER)	
CN6006	*1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
CN6007	*1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P	
CN6008	*1-564-509-11	PLUG, CONNECTOR 6P	
CN6009	1-695-915-11	TAB (CONTACT)	
CN6011	*1-573-986-11	PIN, CONNECTOR (PC BOARD) 5P	
CN6012	*1-508-766-00	PIN, CONNECTOR (5mm PITCH) 4P	
CN6013	*1-508-765-00	PIN, CONNECTOR (5mm PITCH) 3P	

<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D6002	8-719-052-91	DIODE D4SBS4-F	
D6003	8-719-510-53	DIODE D4SB60L	
D6004	8-719-057-96	DIODE D10SC6M-4012	
D6005	8-719-982-20	DIODE MTZJ-30B	
D6007	8-719-911-55	DIODE U05G	
D6008	8-719-073-23	DIODE ST02D-200TA	
D6012	8-719-991-33	DIODE 1SS133T-77	
D6013	8-719-110-03	DIODE RD7.5ESB2	
D6014	8-719-991-33	DIODE 1SS133T-77	
D6017	8-719-063-73	DIODE D1NL20U-TR	
D6018	8-719-991-33	DIODE 1SS133T-77	
D6025	8-719-063-73	DIODE D1NL20U-TR	
D6032	8-719-991-33	DIODE 1SS133T-77	
D6033	8-719-991-33	DIODE 1SS133T-77	
D6035	8-719-018-83	DIODE D2S4M	
D6036	8-719-018-83	DIODE D2S4M	
D6037	8-719-031-78	DIODE S2L40F	
D6038	8-719-312-47	DIODE RBA-406B	
D6042	8-719-979-64	DIODE UF4005PKG23	
D6043	8-719-110-53	DIODE RD20ESB2	
D6044	8-719-979-64	DIODE UF4005PKG23	
D6045	8-719-110-53	DIODE RD20ESB2	
D6046	8-719-110-53	DIODE RD20ESB2	
D6047	8-719-110-53	DIODE RD20ESB2	
D6048 ⚠	8-719-921-88	DIODE MTZJ-13B	
D6049	8-719-031-78	DIODE S2L40F	
D6050	8-719-991-33	DIODE 1SS133T-77	
D6051	8-719-991-33	DIODE 1SS133T-77	

<FUSE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
F6001 ⚠	1-576-232-11	FUSE (H.B.C.) 5A/250V	
	*1-533-725-11	HOLDER, FUSE ; F6001	

<FERRITE BEAD>

REF.NO.	PART NO.	DESCRIPTION	REMARK
FB6009	1-410-397-21	FERRITE	1.1µH

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC6001 ⚠	8-759-468-89	IC TOP209P	
IC6004	8-759-537-24	IC KA7500B	
IC6005	8-749-924-35	PHOTO COUPLER ON3171-R	
IC6006	8-749-924-35	PHOTO COUPLER ON3171-R	
IC6007	8-759-185-47	IC IR2112	
IC6008	8-749-920-61	IC SE-135N	

<COIL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
L6002	1-412-525-31	INDUCTOR	10µH
L6003	1-412-525-31	INDUCTOR	10µH
L6004	1-412-525-31	INDUCTOR	10µH
L6005	1-412-525-31	INDUCTOR	10µH
L6006	1-412-525-31	INDUCTOR	10µH
L6008	1-412-533-21	INDUCTOR	47µH
L6009	1-412-523-41	INDUCTOR	6.8µH
L6010	1-412-523-41	INDUCTOR	6.8µH
L6011	1-412-525-31	INDUCTOR	10µH

<IC LINK>

REF.NO.	PART NO.	DESCRIPTION	REMARK
PS6001 ⚠	1-533-595-31	LINK, IC (3.15A/90V AC, 60V DC)	
PS6002 ⚠	1-533-595-31	LINK, IC (3.15A/90V AC, 60V DC)	
PS6003 ⚠	1-533-597-31	LINK, IC (5A/90V AC, 60V DC)	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q6001	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q6002	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q6003	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
Q6005	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
Q6009	8-729-140-97	TRANSISTOR 2SB734-34	
Q6010	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q6011	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q6012	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
Q6013	8-729-820-82	TRANSISTOR 2SA1208-T	
Q6014	8-729-028-10	TRANSISTOR IRFI744G-LF	
Q6015	8-729-028-10	TRANSISTOR IRFI744G-LF	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
R6000 ⚠	1-202-885-91	SOLID	1M	20%	1/2W
R6001	1-216-049-00	RES,CHIP	1K	5%	1/10W
R6002	1-218-265-11	METAL	8.2M	5%	1W
R6008	1-216-099-00	RES,CHIP	120K	5%	1/10W
R6009	1-215-479-00	METAL	270K	1%	1/4W

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

G CR

REF.NO.	PART NO.	DESCRIPTION				REMARK
R6010	1-215-479-00	METAL	270K	1%	1/4W	
R6013	1-202-968-11	CEMENTED	1.2	5%	10W	
R6014	1-216-089-00	RES,CHIP	47K	5%	1/10W	
R6018	1-216-089-00	RES,CHIP	47K	5%	1/10W	
R6019	1-216-089-00	RES,CHIP	47K	5%	1/10W	
R6022	1-247-791-91	CARBON	22	5%	1/4W	
R6024 ⚠	1-205-998-11	CEMENTED	1	5%	10W	
R6026 ⚠	1-205-998-11	CEMENTED	1	5%	10W	
R6027	1-216-065-00	RES,CHIP	4.7K	5%	1/10W	
R6032 ⚠	1-202-933-61	FUSIBLE	0.1	10%	1/2W	F
R6034	1-216-113-00	RES,CHIP	470K	5%	1/10W	
R6045	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W	
R6046	1-216-081-00	RES,CHIP	22K	5%	1/10W	
R6047	1-249-437-11	CARBON	47K	5%	1/4W	
R6048	1-216-065-00	RES,CHIP	4.7K	5%	1/10W	
R6049	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R6050	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R6051	1-216-674-11	METAL CHIP	9.1K	0.50%	1/10W	
R6052	1-216-049-00	RES,CHIP	1K	5%	1/10W	
R6053	1-249-417-11	CARBON	1K	5%	1/4W	
R6054	1-216-049-00	RES,CHIP	1K	5%	1/10W	
R6055	1-216-065-00	RES,CHIP	4.7K	5%	1/10W	
R6056	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R6057	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R6058	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R6059	1-216-065-00	RES,CHIP	4.7K	5%	1/10W	
R6060	1-249-413-11	CARBON	470	5%	1/4W	F
R6061	1-215-477-00	METAL	220K	1%	1/4W	
R6062	1-249-417-11	CARBON	1K	5%	1/4W	F
R6063	1-249-397-11	CARBON	22	5%	1/4W	F
R6064	1-249-397-11	CARBON	22	5%	1/4W	F
R6065	1-249-441-11	CARBON	100K	5%	1/4W	
R6066	1-216-366-00	METAL OXIDE	0.56	5%	2W	F
R6067	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R6068	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R6069	1-215-477-00	METAL	220K	1%	1/4W	
R6070	1-249-417-11	CARBON	1K	5%	1/4W	F
R6071	1-215-453-00	METAL	22K	1%	1/4W	
R6072	1-215-476-00	METAL	200K	1%	1/4W	
R6073	1-216-041-00	RES,CHIP	470	5%	1/10W	
R6075	1-216-353-00	METAL OXIDE	2.2	5%	1W	F
R6079	1-249-377-11	CARBON	0.47	5%	1/4W	F
R6080	1-249-377-11	CARBON	0.47	5%	1/4W	F
R6081	1-249-377-11	CARBON	0.47	5%	1/4W	F
R6082	1-249-377-11	CARBON	0.47	5%	1/4W	F
R6083	1-249-377-11	CARBON	0.47	5%	1/4W	F
R6084	1-249-377-11	CARBON	0.47	5%	1/4W	F
R6085 ⚠	1-212-849-61	FUSIBLE	4.7	5%	1/4W	F
R6086	1-216-073-00	RES,CHIP	10K	5%	1/10W	

<TRANSFORMER>

REF.NO.	PART NO.	DESCRIPTION
T6002 ⚠	1-424-682-11	TRANSFORMER, LINE FILTER
T6004 ⚠	1-431-732-21	TRANSFORMER, CONVERTER (SRT)
T6005 ⚠	1-429-807-12	TRANSFORMER, CONVERTER (PIT)

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* A-1331-734-A CR BOARD, COMPLETE
****

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
C702	1-102-113-00	CERAMIC	390pF	10%	50V
C703	1-104-664-11	ELECT	47µF	20%	25V
C705	1-161-754-00	CERAMIC	0.001µF	10%	2KV
C708	1-101-880-00	CERAMIC	47pF	5%	50V
C709	1-162-115-00	CERAMIC	330pF	10%	2KV
C710	1-102-114-00	CERAMIC	470pF	10%	50V
C712	1-107-662-11	ELECT	22µF	20%	250V
C713	1-104-664-11	ELECT	47µF	20%	25V

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION
CN701	1-695-915-11	TAB (CONTACT)
CN702	*1-564-511-11	PLUG, CONNECTOR 8P
CN703	*1-564-510-11	PLUG, CONNECTOR 7P
CN704	*1-508-784-00	PIN, CONNECTOR (5mm PITCH) 1P
CN705 ⚠	1-251-182-21	SOCKET, PICTURE TUBE
CN706	*1-564-512-11	PLUG, CONNECTOR 9P

<DIODE>

REF.NO.	PART NO.	DESCRIPTION
D701	8-719-991-33	DIODE 1SS133T-77
D704	8-719-991-33	DIODE 1SS133T-77
D705	8-719-991-33	DIODE 1SS133T-77
D706	8-719-991-33	DIODE 1SS133T-77
D708	8-719-991-33	DIODE 1SS133T-77
D709	8-719-109-84	DIODE RD5.1ESB1

<COIL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
L701	1-410-682-31	INDUCTOR	470µH
L702	1-408-619-31	INDUCTOR	220µH

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION
Q701	8-729-200-17	TRANSISTOR 2SA1091-O
Q703	8-729-045-56	TRANSISTOR 2SC2611-15
Q704	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q705	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q706	8-729-119-76	TRANSISTOR 2SA1175-HFE

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R701	1-219-743-11	CARBON	100	5%	1/2W	
R704	1-260-132-11	CARBON	560K	5%	1/2W	
R706	1-249-425-11	CARBON	4.7K	5%	1/4W	
R707	1-247-807-31	CARBON	100	5%	1/4W	
R708	1-249-411-11	CARBON	330	5%	1/4W	
R709	1-260-099-11	CARBON	1K	5%	1/2W	
R710	1-249-393-11	CARBON	10	5%	1/4W	
R711	1-215-923-00	METAL OXIDE	10K	5%	3W	F
R714	1-202-818-00	SOLID	1K	20%	1/2W	

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
R715	1-260-133-11	CARBON	680K	5%	1/2W	
R716	1-247-815-91	CARBON	220	5%	1/4W	
R717	1-249-435-11	CARBON	33K	5%	1/4W	
R718	1-249-437-11	CARBON	47K	5%	1/4W	
R719	1-219-743-11	CARBON	100	5%	1/2W	
R720	1-249-425-11	CARBON	4.7K	5%	1/4W	
R721	1-202-814-11	SOLID	33K	20%	1/2W	
R722	1-247-863-91	CARBON	22K	5%	1/4W	
R723	1-249-437-11	CARBON	47K	5%	1/4W	
		<SPARK GAP>				
SG701	1-519-422-11	GAP, SPARK				
SG702	1-519-422-11	GAP, SPARK				
SG703	1-519-422-11	GAP, SPARK				

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* A-1331-735-A CG BOARD, COMPLETE
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REF.NO.	PART NO.	DESCRIPTION				REMARK
		<CAPACITOR>				
C733	1-161-754-00	CERAMIC	0.001μF	10%	2KV	
C734	1-102-114-00	CERAMIC	470pF	10%	50V	
C735	1-161-830-00	CERAMIC	0.0047μF		500V	
C736	1-162-115-00	CERAMIC	330pF	10%	2KV	
C737	1-107-662-11	ELECT	22μF	20%	250V	
C738	1-101-880-00	CERAMIC	47pF	5%	50V	
C739	1-104-664-11	ELECT	47μF	20%	25V	
C740	1-102-114-00	CERAMIC	470pF	10%	50V	
		<CONNECTOR>				
CN731	1-695-915-11	TAB (CONTACT)				
CN732	*1-564-508-11	PLUG, CONNECTOR 5P				
CN733	*1-564-511-11	PLUG, CONNECTOR 8P				
CN734	*1-508-784-00	PIN, CONNECTOR (5mm PITCH) 1P				
CN735 ⚠	1-251-182-21	SOCKET, PICTURE TUBE				
CN736	*1-564-512-11	PLUG, CONNECTOR 9P				
CN737	*1-564-512-11	PLUG, CONNECTOR 9P				
		<DIODE>				
D731	8-719-991-33	DIODE 1SS133T-77				
D732	8-719-991-33	DIODE 1SS133T-77				
D733	8-719-991-33	DIODE 1SS133T-77				
D735	8-719-991-33	DIODE 1SS133T-77				
D736	8-719-991-33	DIODE 1SS133T-77				
		<COIL>				
L731	1-408-623-31	INDUCTOR		470μH		
L732	1-408-619-31	INDUCTOR		220μH		
		<TRANSISTOR>				
Q731	8-729-200-17	TRANSISTOR 2SA1091-O				
Q732	8-729-045-56	TRANSISTOR 2SC2611-15				
Q733	8-729-119-78	TRANSISTOR 2SC2785-HFE				
		<RESISTOR>				
R731	1-219-743-11	CARBON	100	5%	1/2W	
R732	1-260-132-11	CARBON	560K	5%	1/2W	
R733	1-215-923-00	METAL OXIDE	10K	5%	3W	F
R735	1-247-807-31	CARBON	100	5%	1/4W	
R736	1-249-425-11	CARBON	4.7K	5%	1/4W	
R737	1-260-099-11	CARBON	1K	5%	1/2W	
R738	1-249-408-11	CARBON	180	5%	1/4W	
R739	1-260-133-11	CARBON	680K	5%	1/2W	
R740	1-202-818-00	SOLID	1K	20%	1/2W	
R741	1-249-393-11	CARBON	10	5%	1/4W	
R742	1-247-815-91	CARBON	220	5%	1/4W	
R744	1-247-891-00	CARBON	330K	5%	1/4W	
R745	1-247-843-11	CARBON	3.3K	5%	1/4W	
R746	1-202-814-11	SOLID	33K	20%	1/2W	
		<SPARK GAP>				
SG731	1-519-422-11	GAP, SPARK				
SG732	1-519-422-11	GAP, SPARK				
SG733	1-519-422-11	GAP, SPARK				

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* A-1331-736-A CB BOARD, COMPLETE
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REF.NO.	PART NO.	DESCRIPTION				REMARK
		<CAPACITOR>				
C762	1-126-964-11	ELECT	10μF	20%	50V	
C763	1-161-754-00	CERAMIC	0.001μF	10%	2KV	
C764	1-102-112-00	CERAMIC	330pF	10%	50V	
C765	1-161-830-00	CERAMIC	0.0047μF		500V	
C766	1-162-115-00	CERAMIC	330pF	10%	2KV	
C767	1-107-662-11	ELECT	22μF	20%	250V	
C768	1-101-880-00	CERAMIC	47pF	5%	50V	
C769	1-104-664-11	ELECT	47μF	20%	25V	
C770	1-102-114-00	CERAMIC	470pF	10%	50V	
		<CONNECTOR>				
CN761	1-695-915-11	TAB (CONTACT)				
CN762	*1-564-508-11	PLUG, CONNECTOR 5P				
CN763	*1-508-784-00	PIN, CONNECTOR (5mm PITCH) 1P				
CN764 ⚠	1-251-182-21	SOCKET, PICTURE TUBE				
CN765	*1-564-512-11	PLUG, CONNECTOR 9P				
CN766	1-564-513-11	PLUG, CONNECTOR 10P				

REF.NO.	PART NO.	DESCRIPTION				REMARK
	<DIODE>					
D761	8-719-991-33	DIODE 1SS133T-77				
D762	8-719-991-33	DIODE 1SS133T-77				
D763	8-719-991-33	DIODE 1SS133T-77				
D765	8-719-991-33	DIODE 1SS133T-77				
D766	8-719-991-33	DIODE 1SS133T-77				
	<COIL>					
L761	1-408-623-31	INDUCTOR		470µH		
L762	1-408-619-31	INDUCTOR		220µH		
	<TRANSISTOR>					
Q761	8-729-200-17	TRANSISTOR 2SA1091-O				
Q762	8-729-045-56	TRANSISTOR 2SC2611-15				
Q763	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q764	8-729-119-76	TRANSISTOR 2SA1175-HFE				
	<RESISTOR>					
R761	1-219-743-11	CARBON	100	5%	1/2W	
R762	1-260-132-11	CARBON	560K	5%	1/2W	
R763	1-215-923-00	METAL OXIDE	10K	5%	3W	F
R765	1-247-807-31	CARBON	100	5%	1/4W	
R766	1-260-099-11	CARBON	1K	5%	1/2W	
R767	1-249-425-11	CARBON	4.7K	5%	1/4W	
R768	1-260-133-11	CARBON	680K	5%	1/2W	
R769	1-202-818-00	SOLID	1K	20%	1/2W	
R770	1-247-815-91	CARBON	220	5%	1/4W	
R771	1-219-743-11	CARBON	100	5%	1/2W	
R772	1-249-393-11	CARBON	10	5%	1/4W	
R773	1-249-413-11	CARBON	470	5%	1/4W	
R774	1-247-895-91	CARBON	470K	5%	1/4W	
R775	1-249-427-11	CARBON	6.8K	5%	1/4W	
R776	1-249-437-11	CARBON	47K	5%	1/4W	
R777	1-249-427-11	CARBON	6.8K	5%	1/4W	
R778	1-202-814-11	SOLID	33K	20%	1/2W	
R779	1-247-815-91	CARBON	220	5%	1/4W	
	<SPARK GAP>					
SG761	1-519-422-11	GAP, SPARK				
SG762	1-519-422-11	GAP, SPARK				
SG763	1-519-422-11	GAP, SPARK				

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* A-1346-678-A D BOARD, COMPLETE
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4-201-023-11	SPACER, INSULATING	
4-202-373-01	SPRING, IC	
4-382-854-11	SCREW (M3X10), P, SW (+)	

REF.NO.	PART NO.	DESCRIPTION				REMARK
	<CAPACITOR>					
C1501	1-163-005-11	CERAMIC CHIP	470pF	10%	50V	
C1503	1-137-399-11	FILM	0.1µF	5%	100V	
C1504	1-164-690-91	CERAMIC CHIP	0.0022µF	5%	50V	
C1506	1-126-969-11	ELECT	220µF	20%	50V	
C1507	1-163-243-11	CERAMIC CHIP	47pF	5%	50V	
C1508	1-137-401-11	FILM	0.22µF	10%	100V	
C1509	1-163-251-11	CERAMIC CHIP	100pF	5%	50V	
C1510	1-126-972-11	ELECT	1000µF	20%	50V	
C1511	1-126-972-11	ELECT	1000µF	20%	50V	
C1512	1-126-960-11	ELECT	1µF	20%	50V	
C1513	1-164-232-11	CERAMIC CHIP	0.01µF	10%	50V	
C1514	1-164-232-11	CERAMIC CHIP	0.01µF	10%	50V	
C1516	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C1517	1-126-964-11	ELECT	10µF	20%	50V	
C1518	1-126-933-11	ELECT	100µF	20%	16V	
C1519	1-126-933-11	ELECT	100µF	20%	16V	
C1520	1-126-964-11	ELECT	10µF	20%	50V	
C1521	1-164-232-11	CERAMIC CHIP	0.01µF	10%	50V	
C1523	1-163-243-11	CERAMIC CHIP	47pF	5%	50V	
C1524	1-136-177-00	FILM	1µF	5%	50V	
C1525	1-104-665-11	ELECT	100µF	20%	25V	
C1526	1-104-664-11	ELECT	47µF	20%	25V	
C1527	1-163-145-00	CERAMIC CHIP	0.0015µF	5%	50V	
C1528	1-163-145-00	CERAMIC CHIP	0.0015µF	5%	50V	
C1529	1-164-690-91	CERAMIC CHIP	0.0022µF	5%	50V	
C1530	1-104-664-11	ELECT	47µF	20%	16V	
C1531	1-164-232-11	CERAMIC CHIP	0.01µF	10%	50V	
C1532	1-126-960-11	ELECT	1µF	20%	50V	
C1601	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V	
C1602	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V	
C1603	1-130-495-00	FILM	0.1µF	5%	50V	
C1604	1-130-495-00	FILM	0.1µF	5%	50V	
C1605	1-107-715-11	ELECT	22µF	20%	50V	
C1606	1-164-232-11	CERAMIC CHIP	0.01µF	10%	50V	
C1607	1-137-370-11	FILM	0.01µF	5%	50V	
C1610	1-126-960-11	ELECT	1µF	20%	50V	
C1611	1-126-960-11	ELECT	1µF	20%	50V	
C1612	1-126-960-11	ELECT	1µF	20%	50V	
C1613	1-126-967-11	ELECT	47µF	20%	50V	
C1614	1-126-967-11	ELECT	47µF	20%	50V	
C1617	1-130-495-00	FILM	0.1µF	5%	50V	
C1618	1-130-495-00	FILM	0.1µF	5%	50V	
C1619	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V	
C1621	1-104-665-11	ELECT	100µF	20%	25V	
C1622	1-164-690-91	CERAMIC CHIP	0.0022µF	5%	50V	
C1624	1-130-495-00	FILM	0.1µF	5%	50V	
C1626	1-130-495-00	FILM	0.1µF	5%	50V	
C1627	1-164-690-91	CERAMIC CHIP	0.0022µF	5%	50V	
C1628	1-126-964-11	ELECT	10µF	20%	50V	
C1630	1-128-550-21	ELECT	2200µF	20%	50V	
C1631	1-128-550-21	ELECT	2200µF	20%	50V	
C1632	1-104-664-11	ELECT	47µF	20%	25V	
C1633	1-104-664-11	ELECT	47µF	20%	25V	
C1634	1-126-961-11	ELECT	2.2µF	20%	50V	
C1635	1-104-666-11	ELECT	220µF	20%	25V	

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REF.NO.	PART NO.	DESCRIPTION				REMARK
C1650	1-163-251-11	CERAMIC CHIP	100pF	5%	50V	
C1651	1-163-251-11	CERAMIC CHIP	100pF	5%	50V	
C1701	1-126-960-11	ELECT	1μF	20%	50V	
C1702	1-126-960-11	ELECT	1μF	20%	50V	
C1703	1-126-964-11	ELECT	10μF	20%	50V	
C1704	1-126-964-11	ELECT	10μF	20%	50V	
C1705	1-163-251-11	CERAMIC CHIP	100pF	5%	50V	
C1706	1-163-251-11	CERAMIC CHIP	100pF	5%	50V	
C1707	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V	
C1708	1-126-935-11	ELECT	470μF	20%	16V	
C1709	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V	
C1710	1-163-243-11	CERAMIC CHIP	47pF	5%	50V	
C1711	1-163-243-11	CERAMIC CHIP	47pF	5%	50V	
C1715	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V	
C1716	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V	
C1717	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V	
C1718	1-126-968-11	ELECT	100μF	20%	50V	
C1719	1-126-968-11	ELECT	100μF	20%	50V	
C1720	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V	
C1721	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V	
C1723	1-163-235-11	CERAMIC CHIP	22pF	5%	50V	
C1724	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V	
C1725	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V	
C1726	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V	
C1727	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V	
C1802	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V	
C1803	1-126-935-11	ELECT	470μF	20%	16V	
C1804	1-126-964-11	ELECT	10μF	20%	50V	
C1805	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V	
C1806	1-104-665-11	ELECT	100μF	20%	25V	
C1807	1-126-964-11	ELECT	10μF	20%	50V	
C1808	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V	
C1809	1-104-665-11	ELECT	100μF	20%	25V	
C1810	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V	
C1811	1-104-665-11	ELECT	100μF	20%	25V	
C1812	1-126-964-11	ELECT	10μF	20%	50V	
C1813	1-104-666-11	ELECT	220μF	20%	25V	
C1814	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V	
C1815	1-104-666-11	ELECT	220μF	20%	25V	
C1816	1-126-964-11	ELECT	10μF	20%	50V	
C1817	1-126-964-11	ELECT	10μF	20%	50V	
C1818	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V	
C1819	1-163-133-00	CERAMIC CHIP	470pF	5%	50V	
C1820	1-163-133-00	CERAMIC CHIP	470pF	5%	50V	
C1821	1-126-964-11	ELECT	10μF	20%	50V	
C1822	1-164-005-11	CERAMIC CHIP	0.47μF		25V	
C1823	1-163-251-11	CERAMIC CHIP	100pF	5%	50V	
C1824	1-164-005-11	CERAMIC CHIP	0.47μF		25V	
C1825	1-163-251-11	CERAMIC CHIP	100pF	5%	50V	
C1826	1-104-665-11	ELECT	100μF	20%	25V	
C1827	1-104-664-11	ELECT	47μF	20%	25V	
C1828	1-104-664-11	ELECT	47μF	20%	25V	
C1829	1-104-664-11	ELECT	47μF	20%	25V	
C1830	1-126-964-11	ELECT	10μF	20%	50V	

REF.NO.	PART NO.	DESCRIPTION	REMARK
	<CONNECTOR>		
CN1501	*1-564-506-11	PLUG, CONNECTOR 3P	
CN1502	1-695-915-11	TAB (CONTACT)	
CN1601	*1-564-508-11	PLUG, CONNECTOR 5P	
CN1604	*1-564-507-11	PLUG, CONNECTOR 4P	
CN1605	*1-508-766-00	PIN, CONNECTOR (5mm PITCH) 4P	
CN1606	*1-779-890-11	CONNECTOR, BOARD TO BOARD 10P	
CN1701	*1-564-511-11	PLUG, CONNECTOR 8P	
CN1702	*1-564-516-11	PLUG, CONNECTOR 13P	
CN1703	*1-779-890-11	CONNECTOR, BOARD TO BOARD 10P	
CN1705	*1-564-505-11	PLUG, CONNECTOR 2P	
CN1708	*1-564-510-11	PLUG, CONNECTOR 7P	
CN1801	1-695-299-11	CONNECTOR, BOARD TO BOARD 50P	
CN1802	*1-764-334-11	PLUG, CONNECTOR 11P	
CN1803	1-564-513-11	PLUG, CONNECTOR 10P	
CN1804	*1-564-508-11	PLUG, CONNECTOR 5P	
CN1805	*1-779-890-11	CONNECTOR, BOARD TO BOARD 10P	
CN1806	*1-779-890-11	CONNECTOR, BOARD TO BOARD 10P	
CN1807	*1-564-511-11	PLUG, CONNECTOR 8P	
CN1808	*1-564-510-11	PLUG, CONNECTOR 7P	
	<DIODE>		
D1501	8-719-109-89	DIODE RD5.6ESB2	
D1502	8-719-908-03	DIODE GP08D	
D1503	8-719-908-03	DIODE GP08D	
D1504	8-719-991-33	DIODE 1SS133T-77	
D1505	8-719-988-61	DIODE 1SS355TE-17	
D1601	8-719-991-33	DIODE 1SS133T-77	
D1603	8-719-991-33	DIODE 1SS133T-77	
D1604	8-719-991-33	DIODE 1SS133T-77	
D1606	8-719-991-33	DIODE 1SS133T-77	
D1611	8-719-921-86	DIODE MTZJ-13	
D1612	8-719-991-33	DIODE 1SS133T-77	
D1613	8-719-921-86	DIODE MTZJ-13	
D1614	8-719-991-33	DIODE 1SS133T-77	
D1615	8-719-991-33	DIODE 1SS133T-77	
D1616	8-719-991-33	DIODE 1SS133T-77	
D1617	8-719-403-00	DIODE MA3240-TX	
D1618	8-719-991-33	DIODE 1SS133T-77	
D1619	8-719-991-33	DIODE 1SS133T-77	
D1620	8-719-403-00	DIODE MA3240-TX	
D1621	8-719-403-00	DIODE MA3240-TX	
D1622	8-719-403-00	DIODE MA3240-TX	
D1703	8-719-109-89	DIODE RD5.6ESB2	
D1704	8-719-109-89	DIODE RD5.6ESB2	
D1705	8-719-109-84	DIODE RD5.1ESB1	
D1706	8-719-109-84	DIODE RD5.1ESB1	
D1707	8-719-109-84	DIODE RD5.1ESB1	
D1708	8-719-109-84	DIODE RD5.1ESB1	
D1709	8-719-109-81	DIODE RD4.7ESB2	
D1710	8-719-109-81	DIODE RD4.7ESB2	
D1711	8-719-109-81	DIODE RD4.7ESB2	
D1712	8-719-109-81	DIODE RD4.7ESB2	
D1801	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D1802	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D1803	8-719-923-60	DIODE MTZJ-T-77-9.1A	

D

REF.NO.	PART NO.	DESCRIPTION		REMARK
D1804	8-719-923-60	DIODE MTZJ-T-77-9.1A		
D1805	8-719-923-60	DIODE MTZJ-T-77-9.1A		
D1806	8-719-923-60	DIODE MTZJ-T-77-9.1A		
		<IC>		
IC1501	8-759-192-71	IC STV9379		
IC1502	8-759-251-31	IC CA0007AM		
IC1503	8-759-998-98	IC LM358D		
IC1602	8-759-250-68	IC TDA7264		
IC1603	8-759-502-21	IC TDA2822M		
IC1701	8-752-908-27	IC CXP86213-003S		
IC1702	8-759-527-76	IC M24C08-MN6T		
IC1703	8-759-100-96	IC µPC4558G2		
IC1704	8-759-100-96	IC µPC4558G2		
IC1706	8-759-352-91	IC PST9143NL		
IC1801	8-759-144-82	IC µPC2405HF		
IC1802	8-759-095-63	IC PQ09RF2		
IC1803	8-759-231-58	IC TA7812S		
IC1804	8-759-069-28	IC PQ05RF11		
IC1805	8-759-100-96	IC µPC4558G2		
		<JACK>		
J1601	1-784-653-11	JACK, PHONO 2P		
		<CHIP, CONDUCTOR>		
JR1502	1-216-295-91	SHORT	0	
JR1503	1-216-295-91	SHORT	0	
JR1504	1-216-295-91	SHORT	0	
JR1505	1-216-295-91	SHORT	0	
JR1506	1-216-295-91	SHORT	0	
JR1508	1-216-295-91	SHORT	0	
JR1510	1-216-295-91	SHORT	0	
JR1511	1-216-295-91	SHORT	0	
JR1512	1-216-295-91	SHORT	0	
JR1513	1-216-295-91	SHORT	0	
JR1514	1-216-295-91	SHORT	0	
JR1701	1-216-295-91	SHORT	0	
		<COIL>		
L1501	1-412-524-11	INDUCTOR		8.2µH
L1601	1-402-711-11	INDUCTOR		0µH
L1602	1-402-711-11	INDUCTOR		0µH
L1701	1-408-603-31	INDUCTOR		10µH
L1702	1-408-598-31	INDUCTOR		3.9µH
L1801	1-408-603-31	INDUCTOR		10µH
		<TRANSISTOR>		
Q1501	8-729-120-28	TRANSISTOR 2SC1623-L5L6		
Q1502	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR		
Q1503	8-729-120-28	TRANSISTOR 2SC1623-L5L6		
Q1505	8-729-120-28	TRANSISTOR 2SC1623-L5L6		
Q1601	8-729-027-56	TRANSISTOR DTC143TKA-T146		

REF.NO.	PART NO.	DESCRIPTION				REMARK
Q1602	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q1603	8-729-027-56	TRANSISTOR DTC143TKA-T146				
Q1604	8-729-027-56	TRANSISTOR DTC143TKA-T146				
Q1605	8-729-027-56	TRANSISTOR DTC143TKA-T146				
Q1607	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q1608	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q1609	1-801-806-11	TRANSISTOR DTC144EKA-T146				
Q1610	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR				
Q1611	8-729-027-56	TRANSISTOR DTC143TKA-T146				
Q1612	8-729-027-56	TRANSISTOR DTC143TKA-T146				
Q1613	8-729-027-56	TRANSISTOR DTC143TKA-T146				
Q1614	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR				
Q1615	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q1616	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q1617	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR				
Q1701	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q1702	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q1703	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q1704	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q1705	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q1706	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q1707	1-801-806-11	TRANSISTOR DTC144EKA-T146				
Q1708	8-729-027-38	TRANSISTOR DTA144EKA-T146				
Q1709	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q1710	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q1711	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q1801	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q1802	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q1803	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q1804	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q1805	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q1806	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q1807	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q1808	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR				
Q1809	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
		<RESISTOR>				
R1501	1-216-353-00	METAL OXIDE	2.2	5%	1W	F
R1502	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W	
R1504	1-216-675-91	METAL CHIP	10K	0.50%	1/10W	
R1505	1-249-377-11	CARBON	0.47	5%	1/4W	F
R1506	1-215-888-00	METAL OXIDE	220	5%	2W	F
R1507	1-216-081-00	RES,CHIP	22K	5%	1/10W	
R1508	1-249-383-11	CARBON	1.5	5%	1/4W	F
R1509	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W	
R1510	1-216-675-91	METAL CHIP	10K	0.50%	1/10W	
R1511	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
R1512	1-216-085-00	RES,CHIP	33K	5%	1/10W	
R1513	1-216-049-00	RES,CHIP	1K	5%	1/10W	
R1514	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1515	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1516	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1517	1-216-081-00	RES,CHIP	22K	5%	1/10W	
R1518	1-216-353-00	METAL OXIDE	2.2	5%	1W	F
R1519	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1520	1-216-089-00	RES,CHIP	47K	5%	1/10W	

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REF.NO.	PART NO.	DESCRIPTION			REMARK
R1521	1-216-097-00	RES,CHIP	100K	5%	1/10W
R1522	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1525	1-216-083-00	RES,CHIP	27K	5%	1/10W
R1526	1-216-083-00	RES,CHIP	27K	5%	1/10W
R1527	1-216-121-91	RES,CHIP	1M	5%	1/10W
R1528	1-216-121-91	RES,CHIP	1M	5%	1/10W
R1529	1-216-025-00	RES,CHIP	100	5%	1/10W
R1530	1-216-097-00	RES,CHIP	100K	5%	1/10W
R1531	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1532	1-216-025-00	RES,CHIP	100	5%	1/10W
R1533	1-249-377-11	CARBON	0.47	5%	1/4W F
R1534	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1537	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1538	1-216-083-00	RES,CHIP	27K	5%	1/10W
R1539	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1540	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1541	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1542	1-216-093-91	RES,CHIP	68K	5%	1/10W
R1543	1-216-093-91	RES,CHIP	68K	5%	1/10W
R1601	1-216-025-00	RES,CHIP	100	5%	1/10W
R1602	1-216-041-00	RES,CHIP	470	5%	1/10W
R1603	1-216-041-00	RES,CHIP	470	5%	1/10W
R1604	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1605	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1606	1-249-397-11	CARBON	22	5%	1/4W F
R1607	1-249-397-11	CARBON	22	5%	1/4W F
R1608	1-249-425-11	CARBON	4.7K	5%	1/4W F
R1609	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1610	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1611	1-249-425-11	CARBON	4.7K	5%	1/4W F
R1614	1-216-357-00	METAL OXIDE	4.7	5%	1W F
R1615	1-216-357-00	METAL OXIDE	4.7	5%	1W F
R1617	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1618	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1620	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1625	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1626	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1629	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1630	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1631	1-249-389-11	CARBON	4.7	5%	1/4W F
R1632	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1633	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1634	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1635	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1636	1-216-075-00	RES,CHIP	12K	5%	1/10W
R1637	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1638	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1639	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1640	1-216-025-00	RES,CHIP	100	5%	1/10W
R1641	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1642	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1643	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1644	1-216-075-00	RES,CHIP	12K	5%	1/10W
R1645	1-216-041-00	RES,CHIP	470	5%	1/10W
R1648	1-249-381-11	CARBON	1	5%	1/4W F
R1649	1-216-089-00	RES,CHIP	47K	5%	1/10W

REF.NO.	PART NO.	DESCRIPTION			REMARK
R1650	1-216-033-00	RES,CHIP	220	5%	1/10W
R1651	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1652	1-216-099-00	RES,CHIP	120K	5%	1/10W
R1653	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1654	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1655	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1656	1-216-295-00	SHORT	0		
R1701	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1702	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1703	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1704	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1705	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1706	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1707	1-216-025-00	RES,CHIP	100	5%	1/10W
R1708	1-216-025-00	RES,CHIP	100	5%	1/10W
R1709	1-216-025-00	RES,CHIP	100	5%	1/10W
R1710	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1711	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1712	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1713	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1714	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1715	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1716	1-216-033-00	RES,CHIP	220	5%	1/10W
R1717	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1718	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1719	1-216-033-00	RES,CHIP	220	5%	1/10W
R1720	1-216-033-00	RES,CHIP	220	5%	1/10W
R1721	1-216-033-00	RES,CHIP	220	5%	1/10W
R1722	1-216-033-00	RES,CHIP	220	5%	1/10W
R1725	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1726	1-216-295-00	SHORT	0		
R1727	1-216-033-00	RES,CHIP	220	5%	1/10W
R1728	1-216-025-00	RES,CHIP	100	5%	1/10W
R1729	1-216-025-00	RES,CHIP	100	5%	1/10W
R1730	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1731	1-216-033-00	RES,CHIP	220	5%	1/10W
R1732	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1733	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1734	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1735	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1736	1-216-033-00	RES,CHIP	220	5%	1/10W
R1737	1-216-033-00	RES,CHIP	220	5%	1/10W
R1738	1-216-025-00	RES,CHIP	100	5%	1/10W
R1739	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1740	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1741	1-216-033-00	RES,CHIP	220	5%	1/10W
R1742	1-216-033-00	RES,CHIP	220	5%	1/10W
R1743	1-216-025-00	RES,CHIP	100	5%	1/10W
R1744	1-216-033-00	RES,CHIP	220	5%	1/10W
R1745	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1746	1-216-025-00	RES,CHIP	100	5%	1/10W
R1747	1-216-025-00	RES,CHIP	100	5%	1/10W
R1748	1-216-025-00	RES,CHIP	100	5%	1/10W
R1749	1-216-033-00	RES,CHIP	220	5%	1/10W
R1750	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1751	1-216-033-00	RES,CHIP	220	5%	1/10W
R1752	1-216-025-00	RES,CHIP	100	5%	1/10W

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1753	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1754	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1755	1-216-025-00	RES,CHIP	100	5%	1/10W	
R1756	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1757	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1758	1-216-025-00	RES,CHIP	100	5%	1/10W	
R1759	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1760	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1762	1-216-065-00	RES,CHIP	4.7K	5%	1/10W	
R1763	1-216-666-11	METAL CHIP	4.3K	0.50%	1/10W	
R1764	1-216-065-00	RES,CHIP	4.7K	5%	1/10W	
R1765	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1766	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R1767	1-216-113-00	RES,CHIP	470K	5%	1/10W	
R1768	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R1769	1-216-115-00	RES,CHIP	560K	5%	1/10W	
R1770	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R1771	1-216-113-00	RES,CHIP	470K	5%	1/10W	
R1772	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R1773	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1774	1-216-025-00	RES,CHIP	100	5%	1/10W	
R1775	1-216-115-00	RES,CHIP	560K	5%	1/10W	
R1778	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R1786	1-216-025-00	RES,CHIP	100	5%	1/10W	
R1787	1-216-025-00	RES,CHIP	100	5%	1/10W	
R1788	1-216-025-00	RES,CHIP	100	5%	1/10W	
R1789	1-216-049-00	RES,CHIP	1K	5%	1/10W	
R1790	1-216-025-00	RES,CHIP	100	5%	1/10W	
R1791	1-216-025-00	RES,CHIP	100	5%	1/10W	
R1792	1-216-089-00	RES,CHIP	47K	5%	1/10W	
R1793	1-216-089-00	RES,CHIP	47K	5%	1/10W	
R1794	1-216-089-00	RES,CHIP	47K	5%	1/10W	
R1795	1-216-089-00	RES,CHIP	47K	5%	1/10W	
R1802	1-215-925-11	METAL OXIDE	22K	5%	3W	F
R1803	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R1804	1-216-113-00	RES,CHIP	470K	5%	1/10W	
R1805	1-216-113-00	RES,CHIP	470K	5%	1/10W	
R1806	1-216-023-00	RES,CHIP	82	5%	1/10W	
R1807	1-216-059-00	RES,CHIP	2.7K	5%	1/10W	
R1808	1-216-059-00	RES,CHIP	2.7K	5%	1/10W	
R1809	1-216-097-00	RES,CHIP	100K	5%	1/10W	
R1810	1-216-023-00	RES,CHIP	82	5%	1/10W	
R1811	1-216-025-00	RES,CHIP	100	5%	1/10W	
R1812	1-216-025-00	RES,CHIP	100	5%	1/10W	
R1813	1-216-049-00	RES,CHIP	1K	5%	1/10W	
R1814	1-216-023-00	RES,CHIP	82	5%	1/10W	
R1815	1-216-025-00	RES,CHIP	100	5%	1/10W	
R1816	1-216-025-00	RES,CHIP	100	5%	1/10W	
R1817	1-216-025-00	RES,CHIP	100	5%	1/10W	
R1818	1-216-059-00	RES,CHIP	2.7K	5%	1/10W	
R1819	1-216-059-00	RES,CHIP	2.7K	5%	1/10W	
R1820	1-216-059-00	RES,CHIP	2.7K	5%	1/10W	
R1821	1-216-025-00	RES,CHIP	100	5%	1/10W	
R1822	1-216-089-00	RES,CHIP	47K	5%	1/10W	
R1823	1-216-089-00	RES,CHIP	47K	5%	1/10W	
R1824	1-216-089-00	RES,CHIP	47K	5%	1/10W	
R1825	1-216-089-00	RES,CHIP	47K	5%	1/10W	

REF.NO.	PART NO.	DESCRIPTION			REMARK
R1826	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1827	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1828	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1829	1-216-089-00	RES,CHIP	47K	5%	1/10W
R1830	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1831	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R1832	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1833	1-216-041-00	RES,CHIP	470	5%	1/10W
R1834	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1835	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1836	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1837	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1838	1-216-041-00	RES,CHIP	470	5%	1/10W
R1839	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1840	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1841	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1842	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1843	1-216-041-00	RES,CHIP	470	5%	1/10W
R1844	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1845	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1846	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1847	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1848	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1849	1-216-041-00	RES,CHIP	470	5%	1/10W

<RELAY>

RY1601	1-755-028-11	RELAY			
RY1602	1-755-028-11	RELAY			

<TERMINAL BOARD>

TB1601	1-694-303-11	TERMINAL, PUSH			

<CRYSTAL>

X1701	1-579-125-11	VIBRATOR, CERAMIC (8.0MHz)			

****

* A-1346-679-A E BOARD, COMPLETE
****

4-382-854-11 SCREW (M3X10), P, SW (+)
7-682-952-09 SCREW +PSW 3X16

<CAPACITOR>

C502	1-126-959-11	ELECT	0.47μF	20%	50V
C505	1-130-471-00	FILM	0.001μF	5%	50V
C506	1-126-933-11	ELECT	100μF	20%	16V
C507	1-126-965-11	ELECT	22μF	20%	50V
C508	1-102-228-00	CERAMIC	470pF	10%	500V
C509	1-106-383-00	MYLAR	0.047μF	10%	200V
C511	1-130-475-00	MYLAR	0.0022μF	5%	50V
C512	1-136-479-11	FILM	0.001μF	5%	50V

E

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION			REMARK
C513	1-126-965-11	ELECT	22µF	20%	50V
C514	⚠ 1-162-116-91	CERAMIC	680pF	10%	2KV
C515	⚠ 1-125-831-91	FILM	0.033µF	3%	630V
C516	⚠ 1-117-648-11	FILM	15000pF	3%	1.2KV
C518	1-130-495-00	FILM	0.1µF	5%	50V
C519	1-106-359-00	MYLAR	0.0047µF	10%	100V
C520	1-162-116-00	CERAMIC	680pF	10%	2KV
C521	1-162-116-00	CERAMIC	680pF	10%	2KV
C523	1-115-521-11	FILM	0.82µF	5%	200V
C524	1-106-359-00	MYLAR	0.0047µF	10%	100V
C526	1-102-228-00	CERAMIC	470pF	10%	500V
C527	1-126-970-11	ELECT	330µF	20%	50V
C528	1-107-957-11	ELECT	1µF	20%	250V
C529	1-109-844-11	FILM	0.68µF	5%	250V
C530	1-107-648-91	ELECT	100µF	20%	160V
C531	1-126-971-11	ELECT	470µF	20%	50V
C532	1-126-971-11	ELECT	470µF	20%	50V
C533	1-107-655-11	ELECT	47µF	20%	250V
C535	1-106-387-00	MYLAR	0.068µF	10%	200V
C536	1-137-374-11	FILM	0.047µF	5%	50V
C537	1-126-968-11	ELECT	100µF	20%	50V
C538	1-126-968-11	ELECT	100µF	20%	50V
C539	1-162-114-00	CERAMIC	0.0047µF		2KV
C540	1-137-372-11	FILM	0.022µF	5%	50V
C541	1-137-374-11	FILM	0.047µF	5%	50V
C542	1-126-934-11	ELECT	220µF	20%	16V
C544	1-104-665-11	ELECT	100µF	20%	25V
C545	1-104-665-11	ELECT	100µF	20%	25V
C548	1-102-244-00	CERAMIC	220pF	10%	500V
C550	1-126-935-11	ELECT	470µF	20%	16V
C551	1-126-935-11	ELECT	470µF	20%	16V
C554	1-130-062-91	FILM	0.0056µF	5%	630V
C555	1-126-960-11	ELECT	1µF	20%	50V
C556	1-130-495-00	MYLAR	0.1µF	5%	50V
C701	1-126-933-11	ELECT	100µF	20%	16V
C801	1-104-665-11	ELECT	100µF	20%	25V
C802	1-104-665-11	ELECT	100µF	20%	25V
C803	1-126-934-11	ELECT	220µF	20%	16V
C804	1-126-934-11	ELECT	220µF	20%	16V
C805	1-126-934-11	ELECT	220µF	20%	16V
C806	1-126-934-11	ELECT	220µF	20%	16V
C807	1-137-374-11	FILM	0.047µF	5%	50V
C808	1-137-374-11	FILM	0.047µF	5%	50V
C809	1-137-374-11	FILM	0.047µF	5%	50V
C810	1-137-374-11	FILM	0.047µF	5%	50V
C811	1-102-074-00	CERAMIC	0.001µF	10%	50V
C812	1-136-169-00	FILM	0.22µF	5%	50V
C813	1-137-374-11	FILM	0.047µF	5%	50V
C815	1-104-665-11	ELECT	100µF	20%	25V
C816	1-130-014-00	FILM	470pF	5%	50V
C817	1-104-664-11	ELECT	47µF	20%	25V
C818	1-126-933-11	ELECT	100µF	20%	16V
C819	1-104-664-11	ELECT	47µF	20%	25V
C820	1-102-129-00	CERAMIC	0.01µF	10%	50V
C821	1-130-495-00	MYLAR	0.1µF	5%	50V
C822	1-107-648-91	ELECT	100µF	20%	160V
C823	1-104-664-11	ELECT	47µF	20%	25V

REF.NO.	PART NO.	DESCRIPTION			REMARK
C824	1-126-964-11	ELECT	10µF	20%	50V
C825	1-104-665-11	ELECT	100µF	20%	25V
C826	1-136-165-00	FILM	0.1µF	5%	50V
C827	1-126-964-11	ELECT	0µF	20%	50V
C828	1-102-824-00	CERAMIC	470pF	5%	50V
C829	1-126-959-11	ELECT	0.47µF	20%	50V
C830	1-102-824-00	CERAMIC	470pF	5%	50V
C831	1-126-960-11	ELECT	1µF	20%	50V
C832	1-126-960-11	ELECT	1µF	20%	50V
C833	1-126-960-11	ELECT	1µF	20%	50V
C834	1-126-968-11	ELECT	100µF	20%	50V
C835	1-126-967-11	ELECT	47µF	20%	50V
C836	1-136-169-00	FILM	0.22µF	5%	50V
C837	1-126-963-11	ELECT	4.7µF	20%	50V
C838	1-104-665-11	ELECT	100µF	20%	25V
C839	1-137-374-11	FILM	0.047µF	5%	50V
C840	1-104-665-11	ELECT	100µF	20%	25V
C841	1-137-374-11	FILM	0.047µF	5%	50V
C842	1-137-374-11	FILM	0.047µF	5%	50V
C844	1-126-933-11	ELECT	100µF	20%	16V
C845	1-126-933-11	ELECT	100µF	20%	16V
C846	1-126-933-11	ELECT	100µF	20%	16V
C847	1-126-933-11	ELECT	100µF	20%	16V
C848	1-126-933-11	ELECT	100µF	20%	16V
C849	1-102-973-00	CERAMIC	100pF	5%	50V
C850	1-102-973-00	CERAMIC	100pF	5%	50V
C851	1-137-374-11	FILM	0.047µF	5%	50V
C852	1-137-374-11	FILM	0.047µF	5%	50V
C853	1-137-374-11	FILM	0.047µF	5%	50V
C854	1-126-933-11	ELECT	100µF	20%	16V
C855	1-102-973-00	CERAMIC	100pF	5%	50V
C856	1-102-973-00	CERAMIC	100pF	5%	50V
C857	1-126-933-11	ELECT	100µF	20%	16V
C858	1-104-665-11	ELECT	100µF	20%	25V
C859	1-104-665-11	ELECT	100µF	20%	25V
C860	1-126-933-11	ELECT	100µF	20%	16V
C861	1-137-374-11	FILM	0.047µF	5%	50V
C862	1-137-374-11	FILM	0.047µF	5%	50V
C863	1-137-374-11	FILM	0.047µF	5%	50V
C864	1-126-933-11	ELECT	100µF	20%	16V
C865	1-137-366-11	FILM	0.0022µF	5%	50V
C866	1-136-177-00	FILM	1µF	5%	50V
C867	1-104-664-11	ELECT	47µF	20%	25V
C868	1-164-096-11	CERAMIC	0.01µF		50V
C869	1-130-487-00	MYLAR	0.022µF	5%	50V
C870	1-164-096-11	CERAMIC	0.01µF		50V
C872	1-126-960-11	ELECT	1µF	20%	50V
C873	1-126-964-11	ELECT	10µF	20%	50V
C876	1-102-973-00	CERAMIC	100pF	5%	50V
C877	1-102-973-00	CERAMIC	100pF	5%	50V
C880	1-104-664-11	ELECT	47µF	20%	5V
C881	1-102-973-00	CERAMIC	100pF	5%	50V
C882	1-102-973-00	CERAMIC	100pF	5%	50V
C883	1-102-973-00	CERAMIC	100pF	5%	50V
C884	1-104-665-11	ELECT	100µF	20%	25V
C885	1-104-664-11	ELECT	47µF	20%	25V

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.		PART NO.	DESCRIPTION	REMARK
C886		1-102-973-00	CERAMIC 100pF 5% 50V	
C887		1-102-973-00	CERAMIC 100pF 5% 50V	
C888		1-102-973-00	CERAMIC 100pF 5% 50V	
C889		1-104-665-11	ELECT 100µF 20% 25V	
C897		1-104-665-11	ELECT 100µF 20% 25V	
			<CONNECTOR>	
CN501	*	1-564-513-11	PLUG, CONNECTOR 10P	
CN502	*	1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
CN503	*	1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
CN504	*	1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
CN505	*	1-506-371-00	PIN, CONNECTOR 2P	
CN506	*	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	
CN507	*	1-564-507-11	PLUG, CONNECTOR 4P	
CN508		1-695-915-11	TAB (CONTACT)	
CN651	*	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	
CN652	*	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	
CN801	*	1-564-507-11	PLUG, CONNECTOR 4P	
CN802	*	1-564-507-11	PLUG, CONNECTOR 4P	
CN803	*	1-564-507-11	PLUG, CONNECTOR 4P	
CN804	*	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	
CN805	*	1-508-766-00	PIN, CONNECTOR (5mm PITCH) 4P	
CN806	*	1-508-765-00	PIN, CONNECTOR (5mm PITCH) 3P	
CN807	*	1-564-509-11	PLUG, CONNECTOR 6P	
CN808	*	1-573-986-11	PIN, CONNECTOR (PC BOARD) 5P	
CN810	*	1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P	
			<DIODE>	
D501		8-719-991-33	DIODE 1SS133T-77	
D502		8-719-991-33	DIODE 1SS133T-77	
D503		8-719-991-33	DIODE 1SS133T-77	
D504		8-719-921-63	DIODE MTZJ-7.5B	
D507		8-719-302-43	DIODE EL1Z	
D508		8-719-900-26	DIODE ERD29-08J	
D509		8-719-945-80	DIODE ERC06-15S	
D510		8-719-991-33	DIODE 1SS133T-77	
D511		8-719-302-43	DIODE EL1Z	
D512		8-719-991-33	DIODE 1SS133T-77	
D513		8-719-302-43	DIODE EL1Z	
D514		8-719-908-03	DIODE GP08D	
D515		8-719-908-03	DIODE GP08D	
D517		8-719-018-82	DIODE RGP02-20EL-6394	
D519		8-719-991-33	DIODE 1SS133T-77	
D520		8-719-302-43	DIODE EL1Z	
D521		8-719-302-43	DIODE EL1Z	
D522		8-719-991-33	DIODE 1SS133T-77	
D523		8-719-991-33	DIODE 1SS133T-77	
D524		8-719-991-33	DIODE 1SS133T-77	
D527		8-719-109-85	DIODE RD5.1ESB2	
D701		8-719-109-63	DIODE RD3.0ESB2	
D702		8-719-991-33	DIODE 1SS133T-77	
D820		8-719-109-68	DIODE RD3.6ESB1	
D829		8-719-109-84	DIODE RD5.1ESB1	
D835		8-719-109-89	DIODE RD5.6ESB2	
D840		8-719-991-33	DIODE 1SS133T-77	

REF.NO.		PART NO.	DESCRIPTION	REMARK
D842		8-719-991-33	DIODE 1SS133T-77	
D845		8-719-991-33	DIODE 1SS133T-77	
D846		8-719-991-33	DIODE 1SS133T-77	
			<FERRITE BEAD>	
FB501		1-410-397-21	FERRITE BEAD INDUCTOR	1.1µH
			<IC>	
IC501		8-759-133-90	IC µPC339C	
IC801		8-759-327-51	IC PA0053B	
IC802		8-759-327-51	IC PA0053B	
IC803		8-759-183-37	IC CA0007AD	
IC804		8-759-464-79	IC PM0011AS	
IC805		8-759-711-28	IC NJM2058D	
IC806		8-759-464-79	IC PM0011AS	
IC808		8-759-464-79	IC PM0011AS	
IC809		8-749-014-37	IC STK392-150	
IC810		8-749-014-37	IC STK392-150	
IC811		8-759-981-96	IC RC4560D	
IC812		8-759-701-56	IC NJM78M05FA	
IC813		8-759-701-65	IC NJM79M05FA	
			<COIL>	
L502		1-410-478-11	INDUCTOR	47µH
L503		1-459-111-00	INDUCTOR	10mH
L505	⚠	1-416-637-11	COIL, HORIZONTAL LINEARITY	
L506		1-412-552-11	INDUCTOR	2.2mH
L801		1-406-979-11	INDUCTOR	220µH
L802		1-406-979-11	INDUCTOR	220µH
L803		1-406-665-11	INDUCTOR	100µH
			<NEON LAMP>	
NL501		1-519-108-99	LAMP, NEON	
			<IC LINK>	
PS601	⚠	1-533-597-31	LINK, IC (5A/90V AC,60V DC)	
PS602	⚠	1-533-597-31	LINK, IC (5A/90V AC,60V DC)	
PS603	⚠	1-533-593-31	LINK, IC (2A/90V AC,60V DC)	
PS604	⚠	1-533-593-31	LINK, IC (2A/90V AC,60V DC)	
PS605	⚠	1-533-593-31	LINK, IC (2A/90V AC,60V DC)	
PS606	⚠	1-533-593-31	LINK, IC (2A/90V AC,60V DC)	
PS607	⚠	1-533-593-31	LINK, IC (2A/90V AC,60V DC)	
PS608	⚠	1-533-593-31	LINK, IC (2A/90V AC,60V DC)	
			<TRANSISTOR>	
Q501		8-729-119-80	TRANSISTOR 2SC2688-LK	
Q502		8-729-044-29	TRANSISTOR 2SD2539(LBSONY-1)	
Q503		8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q504		8-729-823-81	TRANSISTOR 2SC4632LS-CB7	
Q505		8-729-038-83	TRANSISTOR 2SK2251-01-F19	
Q506		8-729-119-78	TRANSISTOR 2SC2785-HFE	

E

• The components identified by ⧓ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION			REMARK	
Q507	8-729-032-61	TRANSISTOR 2SC5022-02				
Q701	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q702	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q801	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q802	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q803	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q804	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q805	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q806	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q807	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q808	8-729-030-02	TRANSISTOR DTC144ESA				
Q809	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q810	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q811	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q812	8-729-119-76	TRANSISTOR 2SA1175-HFE				
	<RESISTOR>					
⧓R1	⚠	METAL			1/4W	
R501	1-249-421-11	CARBON	2.2K	5%	1/4W	
R502	1-216-465-21	METAL OXIDE	27K	5%	2W	F
R503	1-247-843-11	CARBON	3.3K	5%	1/4W	
R504	1-249-419-11	CARBON	1.5K	5%	1/4W	
R505	1-247-885-00	CARBON	180K	5%	1/4W	
R506	1-247-883-00	CARBON	150K	5%	1/4W	
R507	1-249-422-11	CARBON	2.7K	5%	1/4W	
R508	1-260-338-51	CARBON	6.8K	5%	1/2W	
R509	1-249-437-11	CARBON	47K	5%	1/4W	
R510	1-215-918-00	METAL OXIDE	1.5K	5%	3W	F
R511	1-215-918-00	METAL OXIDE	1.5K	5%	3W	F
R512	1-215-918-00	METAL OXIDE	1.5K	5%	3W	F
R513	1-247-843-11	CARBON	3.3K	5%	1/4W	
R514	1-215-443-00	METAL	8.2K	1%	1/4W	
R516	1-215-473-00	METAL	150K	1%	1/4W	
R517	1-215-449-00	METAL	15K	1%	1/4W	
R518	1-249-436-11	CARBON	39K	5%	1/4W	
R519	1-249-429-11	CARBON	10K	5%	1/4W	
R522	1-249-428-11	CARBON	8.2K	5%	1/4W	
R523	1-249-437-11	CARBON	47K	5%	1/4W	
R524	1-249-425-11	CARBON	4.7K	5%	1/4W	
R525	1-249-405-11	CARBON	100	5%	1/4W	F
R527	1-249-425-11	CARBON	4.7K	5%	1/4W	
R528	1-215-910-00	METAL OXIDE	68	5%	3W	F
R529	1-215-449-00	METAL	15K	1%	1/4W	
R530	1-249-429-11	CARBON	10K	5%	1/4W	
R531	1-260-326-11	CARBON	680	5%	1/2W	
R532	1-260-315-71	CARBON	82	5%	1/2W	
R533	1-214-912-00	METAL	91K	1%	1/2W	
R534	1-215-479-00	METAL	270K	1%	1/4W	
R535	1-247-887-00	CARBON	220K	5%	1/4W	
R536	1-249-377-11	CARBON	0.47	5%	1/4W	F
R537	1-260-336-11	CARBON	4.7K	5%	1/2W	
R538	1-249-425-11	CARBON	4.7K	5%	1/4W	
R539	1-249-377-11	CARBON	0.47	5%	1/4W	F
R540	1-249-379-11	CARBON	0.68	5%	1/4W	F
R541	1-247-807-31	CARBON	100	5%	1/4W	
R542	1-215-864-00	METAL OXIDE	150	5%	1W	F

REF.NO.	PART NO.	DESCRIPTION			REMARK	
R543	1-216-349-00	METAL OXIDE	1	5%	1W	F
R544	1-215-864-00	METAL OXIDE	150	5%	1W	F
R545	1-249-377-11	CARBON	0.47	5%	1/4W	F
R546	1-249-377-11	CARBON	0.47	5%	1/4W	F
R547	1-247-807-31	CARBON	100	5%	1/4W	
R548	1-249-413-11	CARBON	470	5%	1/4W	
R549	1-249-431-11	CARBON	15K	5%	1/4W	
R550	1-247-807-31	CARBON	100	5%	1/4W	
R551	1-249-437-11	CARBON	47K	5%	1/4W	
R552	1-247-807-31	CARBON	100	5%	1/4W	
R553	1-247-881-00	CARBON	120K	5%	1/4W	
R554	1-249-405-11	CARBON	100	5%	1/4W	F
R555	1-247-807-31	CARBON	100	5%	1/4W	
R556	1-260-099-11	CARBON	1K	5%	1/2W	
R557	1-216-490-11	METAL OXIDE	39K	5%	3W	F
R558	1-216-490-11	METAL OXIDE	39K	5%	3W	F
R559	1-216-490-11	METAL OXIDE	39K	5%	3W	F
R560	8-719-991-33	DIODE 1SS133T-77				
R562	1-202-838-00	SOLID	100K	10%	1/2W	
R563	1-215-447-00	METAL	12K	1%	1/4W	
R565	1-247-807-31	CARBON	100	5%	1/4W	
R566	1-249-377-11	CARBON	0.47	5%	1/4W	F
R567	1-249-377-11	CARBON	0.47	5%	1/4W	F
R568	1-247-903-00	CARBON	1M	5%	1/4W	
R569	1-216-392-11	METAL OXIDE	1.8	5%	3W	F
R570	1-215-910-00	METAL OXIDE	68	5%	3W	F
R571	1-249-422-11	CARBON	2.7K	5%	1/4W	
R572	1-247-895-91	CARBON	470K	5%	1/4W	
R573	1-249-438-11	CARBON	56K	5%	1/4W	
R574	1-249-435-11	CARBON	33K	5%	1/4W	
R576	1-247-807-31	CARBON	100	5%	1/4W	
R577	1-249-422-11	CARBON	2.7K	5%	1/4W	
R578	1-215-473-00	METAL	150K	1%	1/4W	
R579	1-247-889-00	CARBON	270K	5%	1/4W	
R580	1-249-437-11	CARBON	47K	5%	1/4W	
R581	1-249-437-11	CARBON	47K	5%	1/4W	
R583	1-249-428-11	CARBON	8.2K	5%	1/4W	
R584	1-249-429-11	CARBON	10K	5%	1/4W	
R585	1-216-490-11	METAL OXIDE	39K	5%	3W	F
R586	1-215-892-11	METAL OXIDE	1K	5%	2W	F
R588	1-247-863-91	CARBON	22K	5%	1/4W	
R589	1-247-887-00	CARBON	220K	5%	1/4W	
R591	1-249-425-11	CARBON	4.7K	5%	1/4W	
R595	1-215-464-00	METAL	62K	1%	1/4W	
R596	1-215-473-00	METAL	150K	1%	1/4W	
R597	1-215-464-00	METAL	62K	1%	1/4W	
R701	1-215-449-00	METAL	15K	1%	1/4W	
R702	1-249-421-11	CARBON	2.2K	5%	1/4W	
R703	1-249-421-11	CARBON	2.2K	5%	1/4W	
R704	1-215-457-00	METAL	33K	1%	1/4W	
R705	1-215-457-00	METAL	33K	1%	1/4W	
R706	1-215-457-00	METAL	33K	1%	1/4W	
R801	1-247-807-31	CARBON	100	5%	1/4W	
R802	1-247-807-31	CARBON	100	5%	1/4W	
R803	1-249-430-11	CARBON	12K	5%	1/4W	
R804	1-249-425-11	CARBON	4.7K	5%	1/4W	

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REF.NO.	PART NO.	DESCRIPTION				REMARK
R805	1-247-807-31	CARBON	100	5%	1/4W	
R806	1-249-429-11	CARBON	10K	5%	1/4W	
R807	1-247-807-31	CARBON	100	5%	1/4W	
R808	1-249-429-11	CARBON	10K	5%	1/4W	
R809	1-249-425-11	CARBON	4.7K	5%	1/4W	
R810	1-247-807-31	CARBON	100	5%	1/4W	
R811	1-247-807-31	CARBON	100	5%	1/4W	
R813	1-247-863-91	CARBON	22K	5%	1/4W	
R814	1-247-807-31	CARBON	100	5%	1/4W	
R815	1-247-807-31	CARBON	100	5%	1/4W	
R816	1-247-807-31	CARBON	100	5%	1/4W	
R817	1-247-807-31	CARBON	100	5%	1/4W	
R818	1-249-429-11	CARBON	10K	5%	1/4W	
R819	1-247-807-31	CARBON	100	5%	1/4W	
R820	1-249-437-11	CARBON	47K	5%	1/4W	
R821	1-249-431-11	CARBON	15K	5%	1/4W	
R822	1-249-417-11	CARBON	1K	5%	1/4W	
R823	1-249-417-11	CARBON	1K	5%	1/4W	
R824	1-215-462-00	METAL	51K	1%	1/4W	
R825	1-249-441-11	CARBON	100K	5%	1/4W	
R826	1-215-462-00	METAL	51K	1%	1/4W	
R827	1-216-474-11	METAL OXIDE	82	5%	3W	F
R828	1-249-426-11	CARBON	5.6K	5%	1/4W	
R829	1-249-426-11	CARBON	5.6K	5%	1/4W	
R830	1-249-414-11	CARBON	560	5%	1/4W	
R831	1-249-414-11	CARBON	560	5%	1/4W	
R832	1-249-441-11	CARBON	100K	5%	1/4W	
R833	1-216-474-11	METAL OXIDE	82	5%	3W	F
R834	1-249-441-11	CARBON	100K	5%	1/4W	
R835	1-249-441-11	CARBON	100K	5%	1/4W	
R836	1-247-807-31	CARBON	100	5%	1/4W	
R837	1-249-441-11	CARBON	100K	5%	1/4W	
R838	1-249-421-11	CARBON	2.2K	5%	1/4W	
R839	1-247-807-31	CARBON	100	5%	1/4W	
R841	1-247-815-91	CARBON	220	5%	1/4W	
R842	1-247-807-31	CARBON	100	5%	1/4W	
R843	1-247-807-31	CARBON	100	5%	1/4W	
R844	1-247-807-31	CARBON	100	5%	1/4W	
R845	1-249-441-11	CARBON	100K	5%	1/4W	
R846	1-247-807-31	CARBON	100	5%	1/4W	
R847	1-215-481-00	METAL	330K	1%	1/4W	
R848	1-215-449-00	METAL	15K	1%	1/4W	
R850	1-215-481-00	METAL	330K	1%	1/4W	
R851	1-247-807-31	CARBON	100	5%	1/4W	
R852	1-247-807-31	CARBON	100	5%	1/4W	
R853	1-247-887-00	CARBON	220K	5%	1/4W	
R854	1-249-429-11	CARBON	10K	5%	1/4W	
R856	1-247-807-31	CARBON	100	5%	1/4W	
R857	1-247-807-31	CARBON	100	5%	1/4W	
R858	1-215-455-00	METAL	27K	1%	1/4W	
R859	1-215-455-00	METAL	27K	1%	1/4W	
R860	1-215-455-00	METAL	27K	1%	1/4W	
R861	1-215-455-00	METAL	27K	1%	1/4W	
R862	1-215-455-00	METAL	27K	1%	1/4W	
R863	1-215-455-00	METAL	27K	1%	1/4W	
R865	1-249-424-11	CARBON	3.9K	5%	1/4W	
R866	1-249-437-11	CARBON	47K	5%	1/4W	
R867	1-215-455-00	METAL	27K	1%	1/4W	
R868	1-215-443-00	METAL	8.2K	1%	1/4W	
R869	1-249-425-11	CARBON	4.7K	5%	1/4W	
R870	1-249-437-11	CARBON	47K	5%	1/4W	
R871	1-249-417-11	CARBON	1K	5%	1/4W	
R872	1-249-425-11	CARBON	4.7K	5%	1/4W	
R873	1-247-807-31	CARBON	100	5%	1/4W	
R874	1-249-435-11	CARBON	33K	5%	1/4W	
R875	1-249-441-11	CARBON	100K	5%	1/4W	
R877	1-249-422-11	CARBON	2.7K	5%	1/4W	
R878	1-215-469-00	METAL	100K	1%	1/4W	
R879	1-215-445-00	METAL	10K	1%	1/4W	
R881	1-249-408-11	CARBON	180	5%	1/4W	
R882	1-249-429-11	CARBON	10K	5%	1/4W	
R883	1-249-429-11	CARBON	10K	5%	1/4W	
R884	1-215-445-00	METAL	10K	1%	1/4W	
R885	1-249-441-11	CARBON	100K	5%	1/4W	
R886	1-249-428-11	CARBON	8.2K	5%	1/4W	
R887	1-247-807-31	CARBON	100	5%	1/4W	
R888	1-247-807-31	CARBON	100	5%	1/4W	
R889	1-249-439-11	CARBON	68K	5%	1/4W	
R890	1-249-441-11	CARBON	100K	5%	1/4W	
R891	1-247-843-11	CARBON	3.3K	5%	1/4W	
R892	1-249-425-11	CARBON	4.7K	5%	1/4W	
R893	1-249-421-11	CARBON	2.2K	5%	1/4W	
R894	1-215-455-00	METAL	27K	1%	1/4W	
R895	1-249-421-11	CARBON	2.2K	5%	1/4W	
R896	1-249-441-11	CARBON	100K	5%	1/4W	
R897	1-247-807-31	CARBON	100	5%	1/4W	
R898	1-247-815-91	CARBON	220	5%	1/4W	
R900	1-216-474-11	METAL OXIDE	82	5%	3W	F
R901	1-215-449-00	METAL	15K	1%	1/4W	
R902	1-215-449-00	METAL	15K	1%	1/4W	
R903	1-215-421-00	METAL	1K	1%	1/4W	
R904	1-214-800-11	METAL	2.2	1%	1/2W	
R905	1-214-800-11	METAL	2.2	1%	1/2W	
R906	1-214-800-11	METAL	2.2	1%	1/2W	
R908	1-215-445-00	METAL	10K	1%	1/4W	
R909	1-215-421-00	METAL	1K	1%	1/4W	
R910	1-215-421-00	METAL	1K	1%	1/4W	
R911	1-215-461-00	METAL	47K	1%	1/4W	
R912	1-215-445-00	METAL	10K	1%	1/4W	
R913	1-215-455-00	METAL	27K	1%	1/4W	
R914	1-215-455-00	METAL	27K	1%	1/4W	
R915	1-215-455-00	METAL	27K	1%	1/4W	
R916	1-215-455-00	METAL	27K	1%	1/4W	
R917	1-215-455-00	METAL	27K	1%	1/4W	
R918	1-215-455-00	METAL	27K	1%	1/4W	
R919	1-249-435-11	CARBON	33K	5%	1/4W	
R920	1-214-800-11	METAL	2.2	1%	1/2W	
R921	1-249-429-11	CARBON	10K	5%	1/4W	
R922	1-215-445-00	METAL	10K	1%	1/4W	
R923	1-249-425-11	CARBON	4.7K	5%	1/4W	
R924	1-215-445-00	METAL	10K	1%	1/4W	
R925	1-249-425-11	CARBON	4.7K	5%	1/4W	
R926	1-249-408-11	CARBON	180	5%	1/4W	
R927	1-249-429-11	CARBON	10K	5%	1/4W	

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The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
R928	1-249-429-11	CARBON	10K	5%	1/4W	
R929	1-214-800-11	METAL	2.2	1%	1/2W	
R930	1-214-800-11	METAL	2.2	1%	1/2W	
R931	1-215-445-00	METAL	10K	1%	1/4W	
R933	1-215-445-00	METAL	10K	1%	1/4W	
R934	1-249-422-11	CARBON	2.7K	5%	1/4W	
R935	1-249-429-11	CARBON	10K	5%	1/4W	
R936	1-249-429-11	CARBON	10K	5%	1/4W	
R937	1-249-436-11	CARBON	39K	5%	1/4W	
R938	1-215-421-00	METAL	1K	1%	1/4W	
R939	1-259-878-11	CARBON	1.5M	5%	1/4W	
R940	1-249-441-11	CARBON	100K	5%	1/4W	
R941	1-249-441-11	CARBON	100K	5%	1/4W	
R942	1-249-421-11	CARBON	2.2K	5%	1/4W	
R943	1-249-441-11	CARBON	100K	5%	1/4W	
R944	1-215-421-00	METAL	1K	1%	1/4W	
R945	1-249-439-11	CARBON	68K	5%	1/4W	
R946	1-215-421-00	METAL	1K	1%	1/4W	
R947	1-249-441-11	CARBON	100K	5%	1/4W	
R948	1-247-815-91	CARBON	220	5%	1/4W	
R949	1-247-807-31	CARBON	100	5%	1/4W	
R950	1-247-807-31	CARBON	100	5%	1/4W	
R951	1-247-807-31	CARBON	100	5%	1/4W	
R952	1-247-807-31	CARBON	100	5%	1/4W	
R953	1-249-435-11	CARBON	33K	5%	1/4W	
R954	1-215-433-00	METAL	3.3K	1%	1/4W	
R955	1-215-433-00	METAL	3.3K	1%	1/4W	
R956	1-249-429-11	CARBON	10K	5%	1/4W	
R957	1-214-800-11	METAL	2.2	1%	1/2W	
R958	1-214-800-11	METAL	2.2	1%	1/2W	
R959	1-215-433-00	METAL	3.3K	1%	1/4W	
R961	1-249-425-11	CARBON	4.7K	5%	1/4W	
R962	1-214-800-11	METAL	2.2	1%	1/2W	
R963	1-214-800-11	METAL	2.2	1%	1/2W	
R964	1-215-433-00	METAL	3.3K	1%	1/4W	
R965	1-215-433-00	METAL	3.3K	1%	1/4W	
R966	1-247-815-91	CARBON	220	5%	1/4W	
R967	1-215-455-00	METAL	27K	1%	1/4W	
R968	1-215-455-00	METAL	27K	1%	1/4W	
R969	1-215-455-00	METAL	27K	1%	1/4W	
R970	1-215-455-00	METAL	27K	1%	1/4W	
R971	1-215-455-00	METAL	27K	1%	1/4W	
R972	1-215-455-00	METAL	27K	1%	1/4W	
R973	1-214-800-11	METAL	2.2	1%	1/2W	
R974	1-215-455-00	METAL	27K	1%	1/4W	
R975	1-214-800-11	METAL	2.2	1%	1/2W	
R976	1-215-433-00	METAL	3.3K	1%	1/4W	
R978	1-215-443-00	METAL	8.2K	1%	1/4W	
R979	1-249-425-11	CARBON	4.7K	5%	1/4W	
R980	1-247-815-91	CARBON	220	5%	1/4W	
R981	1-247-815-91	CARBON	220	5%	1/4W	
R982	1-215-469-00	METAL	100K	1%	1/4W	
R983	1-247-815-91	CARBON	220	5%	1/4W	
R984	1-215-445-00	METAL	10K	1%	1/4W	
R985	1-249-429-11	CARBON	10K	5%	1/4W	
R986	1-215-449-00	METAL	15K	1%	1/4W	
R987	1-249-408-11	CARBON	180	5%	1/4W	
R988	1-249-429-11	CARBON	10K	5%	1/4W	
R989	1-249-425-11	CARBON	4.7K	5%	1/4W	
R990	1-249-431-11	CARBON	15K	5%	1/4W	
R991	1-249-429-11	CARBON	10K	5%	1/4W	
R993	1-249-425-11	CARBON	4.7K	5%	1/4W	
R994	1-216-474-11	METAL OXIDE	82	5%	3W	F
R997	1-215-445-00	METAL	10K	1%	1/4W	
R998	1-249-425-11	CARBON	4.7K	5%	1/4W	
R999	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1901	1-249-439-11	CARBON	68K	5%	1/4W	
R1904	1-249-425-11	CARBON	4.7K	5%	1/4W	

<SPARK GAP>

SG501	1-519-422-11	GAP, SPARK				

<TRANSFORMER>

T501	1-437-195-11	TRANSFORMER, HORIZONTAL DRIVE				
T502	⚠ 1-431-211-11	TRANSFORMER, FERRITE (PMT)				
T504	⚠ 1-453-248-21	FBT ASSY (NX-4007//X4T4)				

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* A-1372-413-A H1 BOARD, COMPLETE
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4-203-258-01 HOLDER, LED

<CAPACITOR>

C3003	1-126-157-11	ELECT	10µF	20%	16V	

<CONNECTOR>

CN3001	*1-564-519-11	PLUG, CONNECTOR 4P				
CN3002	*1-564-525-11	PLUG, CONNECTOR 10P				
CN3003	*1-580-690-11	PIN, CONNECTOR (PC BOARD) 4P				
CN3004	*1-691-292-11	PIN, CONNECTOR (PC BOARD) 3P				

<DIODE>

D3002	8-719-992-06	DIODE SLA-580LT3F (STANDBY)				

<IC>

IC3002	8-742-014-11	HYB IC SBX1981-51				

<TRANSISTOR>

Q3002	8-729-120-28	TRANSISTOR 2SC1623-L5L6				

<RESISTOR>

R3001	1-216-683-11	METAL CHIP	22K	0.50%	1/10W	

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3002	1-216-675-91	METAL CHIP	10K	0.50%	1/10W
R3006	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R3007	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R3009	1-216-041-00	RES,CHIP	470	5%	1/10W
R3010	1-216-045-00	RES,CHIP	680	5%	1/10W

<SWITCH>

REF.NO.	PART NO.	DESCRIPTION
S3001	1-571-532-21	SWITCH, TACTIL (PROG+)
S3002	1-571-532-21	SWITCH, TACTIL (PROG-)
S3003	1-571-532-21	SWITCH, TACTIL (VOL+)
S3004	1-571-532-21	SWITCH, TACTIL (VOL-)
S3005	1-571-532-21	SWITCH, TACTIL (INPUT SELECT)
S3006 ⚠	1-571-433-31	SWITCH, PUSH (MAIN POWER)

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* A-1373-658-A UE BOARD, COMPLETE
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<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
C2701	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C2702	1-164-232-11	CERAMIC CHIP	0.01µF	10%	50V
C2703	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C2704	1-164-232-11	CERAMIC CHIP	0.01µF	10%	50V
C2705	1-126-934-11	ELECT	220µF	20%	16V
C2706	1-126-964-11	ELECT	10µF	20%	50V
C2707	1-126-964-11	ELECT	10µF	20%	50V
C2708	1-104-664-11	ELECT	47µF	20%	16V
C2709	1-126-964-11	ELECT	10µF	20%	50V
C2710	1-104-664-11	ELECT	47µF	20%	16V

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION
CN2701	* 1-564-522-11	PLUG, CONNECTOR 7P
CN2702	* 1-564-523-11	PLUG, CONNECTOR 8P
CN2703	1-695-549-11	SOCKET, PIN 21P

<DIODE>

REF.NO.	PART NO.	DESCRIPTION
D2701	8-719-977-22	DIODE DTZ9.1
D2702	8-719-977-22	DIODE DTZ9.1
D2703	8-719-977-22	DIODE DTZ9.1
D2704	8-719-977-22	DIODE DTZ9.1
D2705	8-719-977-22	DIODE DTZ9.1
D2706	8-719-977-22	DIODE DTZ9.1
D2707	8-719-977-22	DIODE DTZ9.1
D2708	8-719-977-22	DIODE DTZ9.1

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
R2702	1-216-022-00	RES,CHIP	75	5%	1/10W
R2703	1-216-033-00	RES,CHIP	220	5%	1/10W
R2704	1-216-039-00	RES,CHIP	390	5%	1/10W
R2705	1-216-039-00	RES,CHIP	390	5%	1/10W
R2706	1-216-024-00	RES,CHIP	91	5%	1/10W
R2707	1-216-023-00	RES,CHIP	82	5%	1/10W
R2709	1-216-113-00	RES,CHIP	470K	5%	1/10W
R2710	1-216-089-00	RES,CHIP	47K	5%	1/10W
R2711	1-216-113-00	RES,CHIP	470K	5%	1/10W
R2712	1-216-089-00	RES,CHIP	47K	5%	1/10W
R2715	1-216-025-91	RES,CHIP	100	5%	1/10W
R2716	1-216-295-91	SHORT	0		
R2717	1-216-025-91	RES,CHIP	100	5%	1/10W
R2718	1-216-295-91	SHORT	0		

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* A-1375-171-A H2 BOARD, COMPLETE
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<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
C3203	1-126-157-11	ELECT	10µF	20%	16V
C3204	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C3205	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION
CN3201	* 1-564-519-11	PLUG, CONNECTOR 4P
CN3202	* 1-564-526-31	PLUG, CONNECTOR 11P
CN3204	* 1-564-520-11	PLUG, CONNECTOR 5P

<JACK>

REF.NO.	PART NO.	DESCRIPTION
J3201	1-784-658-11	TERMINAL BLOCK, S
J3202	1-507-806-00	JACK 1P

<COIL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
L3201	1-408-615-31	INDUCTOR	100µH
L3202	1-408-615-31	INDUCTOR	100µH

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3202	1-216-025-00	RES,CHIP	100	5%	1/10W
R3203	1-216-025-00	RES,CHIP	100	5%	1/10W
R3207	1-216-654-11	METAL CHIP	1.3K	0.50%	1/10W
R3209	1-216-033-00	RES,CHIP	220	5%	1/10W
R3210	1-216-033-00	RES,CHIP	220	5%	1/10W
R3211	1-216-033-00	RES,CHIP	220	5%	1/10W
R3212	1-216-033-00	RES,CHIP	220	5%	1/10W

<SWITCH>

REF.NO.	PART NO.	DESCRIPTION
S3205	1-571-532-21	SWITCH, TACTIL (AUTO CONVERGENCE)
S3206	1-571-532-21	SWITCH, TACTIL (AUTO PRESET)

****

ZR **ZG**

REF.NO.	PART NO.	DESCRIPTION				REMARK
	* A-1390-784-A	ZR BOARD, COMPLETE				
		******************************				
		<CONNECTOR>				
CN1401	*1-564-510-11	PLUG, CONNECTOR 7P				
CN1403	*1-564-506-11	PLUG, CONNECTOR 3P				
CN1404	*1-564-507-11	PLUG, CONNECTOR 4P				
CN1405	*1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P				
		<CONNECTOR>				
DY1401	!1-451-454-11	DEFLECTION YOKE				
		<RESISTOR>				
R1401	1-249-414-11	CARBON	560	5%	1/4W	
R1402	1-249-414-11	CARBON	560	5%	1/4W	
R1403	1-216-476-11	METAL OXIDE	180	5%	3W	F
R1415	1-216-475-11	METAL OXIDE	120	5%	3W	F
R1418	1-216-475-11	METAL OXIDE	120	5%	3W	F

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REF.NO.	PART NO.	DESCRIPTION				REMARK
	* A-1390-785-A	ZG BOARD, COMPLETE				
		******************************				
	4-382-854-11	SCREW (M3X10), P, SW (+)				
		<CAPACITOR>				
C1433	1-104-999-11	MYLAR	0.1μF	10%	200V	
C1434	1-107-362-11	FILM	0.0047μF	10%	200V	
C1435	1-107-667-11	ELECT	2.2μF	20%	160V	
C1436	1-130-471-00	FILM	0.001μF	5%	50V	
C1437	1-130-471-00	FILM	0.001μF	5%	50V	
C1438	1-107-362-11	FILM	0.0047μF	10%	200V	
C1439	1-161-830-00	CERAMIC	0.0047μF	99%	500V	
C1440	1-104-664-11	ELECT	47μF	20%	25V	
C1441	1-104-999-11	MYLAR	0.1μF	10%	200V	
C1443	1-126-935-11	ELECT	470μF	20%	16V	
C1444	1-107-639-11	ELECT	47μF	20%	160V	
C1445	1-126-933-11	ELECT	100μF	20%	16V	
C1446	1-126-933-11	ELECT	100μF	20%	16V	
C1450	1-130-471-00	FILM	0.001μF	5%	50V	
		<CONNECTOR>				
CN1431	*1-564-508-11	PLUG, CONNECTOR 5P				
CN1432	*1-564-510-11	PLUG, CONNECTOR 7P				
CN1433	*1-564-507-11	PLUG, CONNECTOR 4P				
CN1434	*1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P				
CN1436	1-695-915-11	TAB (CONTACT)				
CN1461	*1-564-506-11	PLUG, CONNECTOR 3P				
CN1462	*1-564-507-11	PLUG, CONNECTOR 4P				
CN1464	*1-564-507-11	PLUG, CONNECTOR 4P				
		<DIODE>				
D1431	8-719-110-88	DIODE RD39ESB2				
D1432	8-719-110-88	DIODE RD39ESB2				
D1433	8-719-991-33	DIODE 1SS133T-77				
		<CONNECTOR>				
DY1431	!1-451-454-11	DEFLECTION YOKE				
		<COIL>				
L1431	1-410-478-11	INDUCTOR	47μH			
		<TRANSISTOR>				
Q1431	8-729-017-06	TRANSISTOR 2SC4793				
Q1432	8-729-017-05	TRANSISTOR 2SA1837				
Q1433	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q1434	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1435	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1436	8-729-119-78	TRANSISTOR 2SC2785-HFE				
		<RESISTOR>				
R1431	1-249-414-11	CARBON	560	5%	1/4W	
R1432	1-249-414-11	CARBON	560	5%	1/4W	
R1433	1-249-377-11	CARBON	0.47	5%	1/4W	F
R1435	1-216-475-11	METAL OXIDE	120	5%	3W	F
R1436	1-216-475-11	METAL OXIDE	120	5%	3W	F
R1437	1-249-414-11	CARBON	560	5%	1/4W	
R1438	1-215-451-00	METAL	18K	1%	1/4W	
R1439	1-215-451-00	METAL	18K	1%	1/4W	
R1440	1-249-414-11	CARBON	560	5%	1/4W	F
R1441	1-247-815-91	CARBON	220	5%	1/4W	
R1442	1-247-815-91	CARBON	220	5%	1/4W	
R1443	1-249-377-11	CARBON	0.47	5%	1/4W	F
R1444	1-247-815-91	CARBON	220	5%	1/4W	
R1445	1-249-403-11	CARBON	68	5%	1/4W	
R1448	1-249-417-11	CARBON	1K	5%	1/4W	
R1449	1-249-403-11	CARBON	68	5%	1/4W	
R1450	1-249-417-11	CARBON	1K	5%	1/4W	
R1451	1-247-815-91	CARBON	220	5%	1/4W	
R1452	1-249-417-11	CARBON	1K	5%	1/4W	
R1453	1-249-401-11	CARBON	47	5%	1/4W	
R1454	1-260-311-11	CARBON	39	5%	1/2W	
R1455	1-249-384-11	CARBON	1.8	5%	1/4W	F
R1456	1-216-476-11	METAL OXIDE	180	5%	3W	F
R1457	1-249-417-11	CARBON	1K	5%	1/4W	F
R1458	1-249-384-11	CARBON	1.8	5%	1/4W	F
R1459	1-249-400-11	CARBON	39	5%	1/4W	F
R1461	1-249-414-11	CARBON	560	5%	1/4W	
R1462	1-249-414-11	CARBON	560	5%	1/4W	
R1465	1-216-475-11	METAL OXIDE	120	5%	3W	F
R1468	1-216-475-11	METAL OXIDE	120	5%	3W	F

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The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
		MISCELLANEOUS	
		********************	
	⚠ 1-223-925-11	RESISTOR ASSY (HIGH-VOLTAGE)	
	⚠ 1-451-455-11	DEFLECTION YOKE (R, G)	
	⚠ 1-451-455-21	DEFLECTION YOKE (B)	
	⚠ 1-452-790-11	NECK ASSY (NA-295)	
	1-452-909-31	MAGNET ASSY, 4 POLE	
	⚠ 1-453-248-21	FBT ASSY(NX-4007//X4T4)	
	1-505-426-11	SPEAKER (10.6CM)	
	1-528-864-11	BATTERY, SOLAR	
	1-543-653-11	CORE ASSY, BEAD (DIVISION TYPE)	
	⚠ 1-765-286-11	CORD, POWER (EXCEPT KP-41S5U)	
	⚠ 1-776-860-11	CORD, POWER (KP-41S5U)	
	⚠ 8-598-955-12	BLOCK ASSY, HIGH-VOLTAGE	
	⚠ A-1501-259-A	MECHANICAL ASSY (R), SLANT	
	⚠ A-1501-260-A	MECHANICAL ASSY (G), SLANT	
	⚠ A-1501-261-A	MECHANICAL ASSY (B), SLANT	

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REF.NO.	PART NO.	DESCRIPTION	REMARK
		ACCESSORIES AND PACKING MATERIALS	
		**	
	3-867-512-11	MANUAL, INSTRUCTION (ENGLISH, GERMAN, FRENCH, ITALIAN, DUTCH, TURKISH)	(KP-41S5)
	3-867-512-21	MANUAL, INSTRUCTION (SPANISH, PORTUGUESE, SWEDISH, FINNISH, NORWEIGIAN, DANISH)	(KP-41S5)
	3-867-512-31	MANUAL, INSTRUCTION (ENGLISH)	(KP-41S5U)
	3-867-512-41	MANUAL, INSTRUCTION (ENGLISH, CZECK, POLISH, MAGYAR, BULGARIAN, RUSSIAN)	(KP-41S5K/41S5R)
	3-867-512-51	MANUAL, INSTRUCTION (FRENCH)	(KP-41S5B)
	3-867-512-61	MANUAL, INSTRUCTION (ENGLISH, GREEK)	(KP-41S5G)
	3-867-513-11	INSTRUCTIONS (TV SYSTEM)	(KP-41S5B)
	* 4-029-168-01	BAG, PROTECTION	
	* 4-030-895-01	JOINT	
	* 4-041-423-11	SHEET, PROTECTION	
	* 4-061-032-01	CUSHION (UPPER) (ASSY)	
	* 4-061-033-01	CUSHION (LOWER) (ASSY)	
	* 4-062-158-01	TRAY	
	* 4-062-159-01	INDIVIDUAL CARTON	
		REMOTE COMMANDER	
		***************************	
	1-473-692-11	COMMANDER, STANDARD (RM-862)	

9-965-403-01

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HDC Projector Division Company

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